



Future Watch: It's been a long time coming, but touch technology may finally be at the tipping point. Move over, mouse. **PAGE 36**

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FEBRUARY 11, 2008
VOL. 42, NO. 7 \$5/COPY

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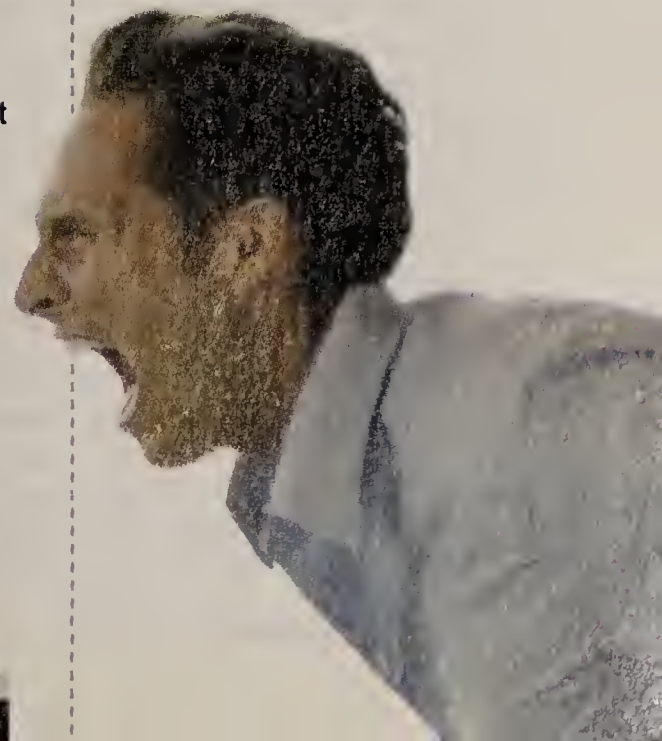
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COVER: ILLUSTRATION BY TIM BOWER



Don Tennant

The Green Pall

LAST FALL, I had the opportunity to moderate a roundtable discussion in which a group of CIOs and other senior executives gathered to share their ideas, experiences and priorities as corporate IT leaders. To prepare, I interviewed each participant ahead of time to get a sense of his top concerns so that I could create the agenda.

In light of the buzz we've all been hearing around green computing, I wanted to find out where that topic ranked on their lists. When I asked, I felt a surprising, but distinct, global cooling.

"It's not a high priority," groaned the senior vice president of IT at a medical services company in the Midwest.

"It's minor for us," yawned the vice president of enterprise architecture and planning at a West Coast entertainment firm.

Before I had made it through even half of my pre-roundtable interviews, I stopped asking the question. In the end, there was no discussion of green computing on the agenda.

I didn't get it. With energy costs skyrocketing, why weren't these guys more concerned with finding ways to cut their power consumption? Why did they have so little interest in sharing experiences and best practices so they could put those enormous sums of money to better use? What was I missing?

And then it clicked. I

had cast a pall over the question by how I phrased it. The pall was green.

There was a time when "green" connoted something that was dear to the hearts of all corporate executives. Green was the color of money. Now it's the hue of tree-huggers' cheeks, and IT executives are dealing with far too many headaches to let themselves be led on an environmental guilt trip. When a CIO is trying to help steer the corporate ship through recessionary waters, and he's worrying about what will happen if it capsizes, don't start whining about oil spills. Right or wrong, he doesn't want to hear it.

It's as if green has become the poison ivy of the corporate IT agenda. And vendors are hardly providing any calamine. Instead, they're spreading

■ **There was a time when green was the color of money. Now it's the hue of tree-huggers' cheeks.**

the irritation in the form of green marketing hype, falling over themselves to be perceived as enablers of a green data center.

It reminds me of the phenomenon about two years ago, when utility computing (a.k.a. "autonomic computing" or "on-demand computing") was the buzzphrase du jour. IT vendors were recasting their product and marketing strategies around it, and start-ups were forming to position themselves as dedicated utility-computing resources.

One of those start-ups was Cassatt, a company created by Bill Coleman, who had previously co-founded BEA Systems. Cassatt's initial flagship product was a dynamic resource provisioning tool called Collage, and Coleman hawked it as a utility computing godsend.

What's especially interesting is that if you go to Cassatt's Web site today, you'll find no reference to Collage, and "utility computing" is upstaged by "active power management" and the proclamation that

"Cassatt software makes data centers more efficient — and more green." Click on the Products tab, and you're taken to a page that depicts the greening of a potted shrub.

I met with Coleman last November, and I asked him about the green repositioning. "Was there some sort of brainstorming session at Cassatt that said, 'This green thing is all the buzz; maybe we should move our pitch around that?'" I asked. "Was that the way it worked?"

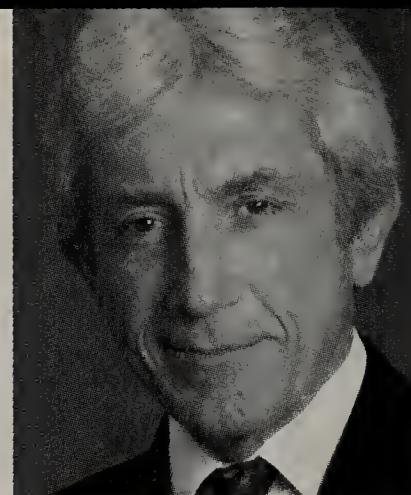
Coleman's response was as refreshing as a spring rain. "Ultimately," he said, "I'd say that is the way it worked."

Of course it is. But I don't know of many CEOs who would have been as gutsy and honest in acknowledging it.

The zealous usurpation of the green moniker by marketers, combined with visions of priority-challenged enviro-nannies that the label often conjures, is creating a backlash that's stealing attention from the energy issue.

That has to change. Next week, when we release our first annual special report "Computerworld's Top 12 Green-IT Companies," you'll see why. ■

Don Tennant is editorial director of Computerworld and InfoWorld. Contact him at don_tennant@computerworld.com, and visit his blog at <http://blogs.computerworld.com/tennant>.



Some Guidelines for Disaster Recovery

I sympathize with C.J. Kelly: It is very difficult to get people who are already overstretched to consider something they think may never happen ["Planning a Recovery That Isn't a Disaster," Security Manager's Journal, Jan. 21].

She wrote, "Basically, we need to try to ensure that we can continue to operate, even if our main facility is destroyed or simply inaccessible." I agree completely, but if you state that as your objective, you are not helping your cause. Many people put off until later problems that they think are too difficult to solve.

Kelly also says she may try to do the work on her own time. That would be a mistake. Instead, enlist the help of the departments you are there to support.

I helped design the disaster recovery and business continuity plans for a bank. The original plan assumed that our regional headquarters were completely destroyed. I argued that while the plan needed to cover that eventuality, it should also consider more likely events. I then asked various managers to imagine a small fire that destroys

just one room. To help them along, I gave them a list of possible consequences, such as papers and local computer records that would be permanently lost.

I next suggested a larger fire, with the main server room lost. I reassured the managers that it was my responsibility to ensure that duplicate services were available at a disaster recovery site, but they needed to be sure that their staff could connect to those services.

I also asked them to imagine different periods of service loss — for an hour, for several hours, for a day, for several days or for longer — and told them to consider the effect for each of their major business processes.

The point of the exercise is to prioritize. I tell the managers that our staff will be busy restoring service and will do so in the order the business has requested. If a manager called to ask the status of a nonurgent service, he would be taking resources away from fixing the business-critical applications.

■ **Mark Lomas**, information security officer, London

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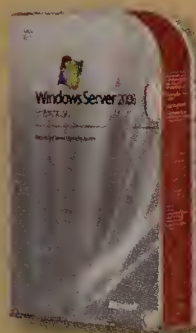
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Jay Cline believes employees shouldn't be surprised to receive a home visit from a corporate auditor if they want to continue working on confidential data at home.



News Digest

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THE WEEK AHEAD

MONDAY: The Microsoft Office System Developer Conference 2008 opens in San Jose with a keynote by Bill Gates, the software vendor's soon-to-be-departing chairman.

TUESDAY: Microsoft plans to release a dozen security updates, matching its monthly patch-release record. Seven of the 12 updates are rated "critical" by the company.

FRIDAY: The U.S. Census Bureau issues its report on e-commerce sales during last year's fourth quarter.



ISTOCK

SERVERS

Three HP User Groups Agree on Merger Plan

THREE INDEPENDENT Hewlett-Packard user groups announced last week that they plan to merge into a single organization in an effort to increase their clout with the IT vendor.

The groups, which have a combined total of more than 50,000 members, said they also hope to reduce costs while reaching out to younger users of Hewlett-Packard Co.'s technologies through social networks and other Web 2.0 tools.

The planned merger involves Encompass, which originated as a group for users of the former Digital

Equipment Corp.; ITUG, which represents users of HP's NonStop fault-tolerant systems; and HP-Interex EMEA, a Brussels-based affiliate of Interex, a U.S. group that folded in 2005.

The merger has been approved by the boards of the three user groups but still requires a positive vote by their memberships. Officials said they expect to have the new organization formed by HP's annual technical conference, which is scheduled for June in Las Vegas.

Among the things still to be determined is a new name; for now, the combined group is being referred to by

the code name Endeavor.

Scott Healy, ITUG's chairman, said NonStop users "will stay a strong community" after the merger. But Healy, who is vice president of industry solutions at GoldenGate Software Inc., added that many ITUG members are also responsible for other systems. The merger will help them gain access to a broader base of peers and more training programs, he said.

Another goal for the combined user group is to add more members, especially among a younger demographic, said Nina Buik, president of Encompass. To remain relevant and viable, "it's important that we grow," she said.

The merger should also help lower costs, according to Buik, who works as a senior vice president at IT training firm MindIQ Corp. "We're all basically paying for the same type of infrastructure," she said.

One HP user group that isn't joining in the planned merger is Vivit, formerly known as OpenView Forum International. Buik said that Vivit, which focuses on OpenView and other HP software products, was asked if it wanted to join, but it declined.

Vivit officials weren't available for comment.

— Patrick Thibodeau

HARDWARE

Dell Revamps Corporate Support Model

DELL INC. last week unveiled a corporate support program that can be customized to provide specific services on a firm schedule.

The older support model, which required that users select from a predefined set of services, has been scrapped, the company said.

The new ProSupport portfolio lets businesses buy support programs to set up and fix both hardware and critical applications, said Steve Meyer, vice president of global services at Dell.

"It's not so terribly different from the original model they had," said Ron Silliman,

“It's not so terribly different from the original model they had. It's a return to that.”

RON SILLIMAN,
ANALYST, GARTNER INC.

an analyst at Gartner Inc.

He said constant changes over time had muddled the program, making it difficult to meet the needs of many users. "Time does those things," Silliman said.

ProSupport pricing varies based on the system and options selected, Dell said.

— AGAM SHAH,

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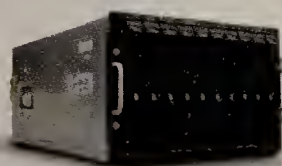
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BUSINESS INTELLIGENCE

IBM Adds Integrated BI Bundles After Closing Acquisition of Cognos

NEW YORK

LESS THAN a week after completing its \$5 billion acquisition of Cognos Inc., IBM announced a set of new product offerings that integrate some of its technologies with the business intelligence vendor's Cognos 8 software.

For instance, IBM said it is tying Cognos 8 to its own Information Server and InfoSphere Warehouse technologies while also offering templates for integrating the BI software with its FileNet business process management tools.

Among those at IBM's press conference here last week was Paul Valle, CIO and vice president of IT at Papa Gino's Holdings Corp. The Dedham, Mass.-based restaurant chain installed Cognos-based BI systems last year, and Valle said he can see the potential benefits of IBM's integrated product set. Papa Gino's

What's New

IBM's new offerings include:

- A Cognos 8 BI "starter pack" for InfoSphere Warehouse, IBM's data warehousing software.
- Pre-integration of Cognos 8 with IBM's Information Server data integration tools.
- An IBM Dashboard Accelerator starter kit bundled with Cognos 8 BI.

also uses IBM's blade servers and its System i mid-range machines.

But Valle wasn't convinced of the cultural match between IBM and Cognos. He said Papa Gino's awarded the contract to the BI vendor "not just because of their product, but because of their culture — they cared about us."

After the software sale, a Cognos representative attended many of the IT department's weekly status meetings even though there was no contractual requirement to do so. "The care they gave us during

the sales cycle went beyond [what was required]," Valle said. "I'm hoping that goes through with IBM."

Papa Gino's is using Cognos 8 in an effort to improve business forecasts and budgeting at its 370 pizzerias and sandwich shops, and to analyze pizza delivery times.

Among other things, the company wants to help restaurant managers ensure that customers are given accurate times for home deliveries, which account for about one-third of the company's pizza sales.

"Anything we can do to measure and improve a third of our business is a huge thing to us," Valle said.

Steve Mills, senior vice president of IBM's software group, said the Cognos deal likely won't be the company's last in the BI market. Mills wouldn't specify which other technologies IBM might want, but he said that the company's acquisition strategy isn't based solely on buying the customer lists of other vendors. "We buy companies for lift, for growth, for strategic advantage," he said, "not just simply for mass."

— Patrick Thibodeau

Short Takes

■ The **Wisconsin Alumni Research Foundation**, a nonprofit organization that supports research at the University of Wisconsin-Madison, has filed a lawsuit charging **Intel Corp.** with using a patented technology in processor architectures, including the Core 2 Duo.

■ **Dell Inc.** announced a new line of EqualLogic PS5000 Series network storage products just five days after completing its \$1.4 billion acquisition of EqualLogic Inc. Pricing starts at \$19,000.

■ Less than a week after launching a blog to gather feedback from air travelers, the **Transportation Security Administration** instructed local TSA teams to stop requiring people to remove all electronics from carry-on bags during screenings. Bloggers had questioned the practice, which wasn't official TSA policy and was only in effect at some airports.

■ **Mozilla Corp.** has issued 10 patches for its **Firefox** browser — three for critical flaws, including one that can be exploited to run arbitrary code on a machine.

HARDWARE

Body Heat May Power New Energy-Saving Chip

A NEW ENERGY-EFFICIENT chip designed by a research team led by MIT may one day run implantable medical devices using human body heat as an energy source.

The new chip design, unveiled last week at the International Solid State Circuits Conference in San Francisco, will consume 10 times less power than tradi-

tional chips, said research team member Joyce Kwong, a graduate student in MIT's Department of Electrical Engineering and Computer Science.

Kwong said the chip, now in the proof-of-concept stage, is likely to be used one day in portable electronic devices like cell phones and implantable medical systems.

Dennis Buss, chief scientist at Texas Instruments Inc. and a member of the development team, estimated that it will be five years before work on the chip is complete.

Buss said he believes that human body heat or even movement could power the chips if they are used in implantable devices like heart monitors.

"Power consumption is get-



Researcher Joyce Kwong holds the new chip.

ting to the level that scavenging becomes possible," he noted. "That means you could obtain voltage from body heat or motion."

The key to the chip's improved energy efficiency is making it work at a reduced voltage — 0.3 volts, compared with the 1 volt needed to run today's mobile processors, Kwong said.

— SHARON GAUDIN

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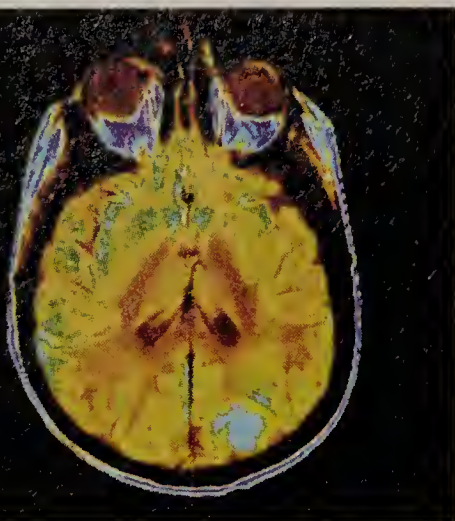
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HARDWARE

IBM Community Grid Helps Cancer Database



GETTY IMAGES

Patient histories and other information will join the collection of images in the cancer institute's database.

A TEAM OF RESEARCHERS

overseen by The Cancer Institute of New Jersey has received a National Institutes of Health grant to expand a database of digital medical images to include patient data from cancer centers around the country.

David Foran, director of the New Brunswick, N.J.-based cancer research organization, said the \$2.5 million grant will be used to augment the database with patient genomic profiles, medical histories and other data from an as-yet-unknown number of health care facilities.

The institute last year created digital images of thousands of cancerous tissues and cells and then created a database to store them using a high-performance IBM Power6 570 Series system and computational time on the IBM-run World Community Grid.

IBM donated the hardware and computational time to the center.

"We want [this database] to plug and play with other databases. . . . People doing cancer research of whatever sort can use the information here," said Joel Saltz,

chairman of biomedical informatics at the Ohio State University Medical Center in Columbus and a member of the research team.

The grid technology will help researchers "develop ways to pool information, interpret that information, make use of it and assess if your methods of prediction are useful," he said.

Foran added that the system will also allow doctors to quickly gain access to data that until now was "likely to be stored in a crate."

— Sharon Gaudin

BETWEEN THE LINES

By John Klossner



BENCHMARKS LAST WEEK

Microsoft Corp. released Windows Server 2008 to manufacturing, three weeks before the official launch of the operating system, SQL Server 2008 and Visual Studio 2008, at a Feb. 27 event in Los Angeles.

Gartner Inc. said that 271.2 million PCs were

shipped worldwide last year, up 13.4% from the 2006 total. The research firm said **Hewlett-Packard Co.** was the top vendor, with an 18.2% market share.

THREE YEARS AGO: HP's board ousted Carly Fiorina from her job as the company's chairman and CEO.

Global Dispatches

IBM India Raises Standards for Staff

BANGALORE, INDIA — IBM has implemented new procedures for evaluating its workers in India as part of an effort to improve quality.

"We are pioneering new ways for our people to certify their skill levels, as both a validation of their value to clients and to reinforce the quality of our employees' skill sets," said a spokesman for IBM India, which is based here.

IBM said it is in the process of screening and testing some of its Indian employees. However, it would not comment on published reports that it dismissed 700 entry-level services programmers in India after they failed to meet per-

formance requirements.

IBM employed 73,000 people in India at the end of last year, up from 53,000 at the end of 2006.

John Ribeiro,
IDG News Service

Pay for U.K. IT Contractors Jumps

LONDON — Pay for IT contractors working in the U.K.'s financial services sector has increased 11% over the past six months, according to the Association of Technology Staffing Companies.

A survey by the London-based IT recruiting organization found that hourly rates for the financial services contractors increased from £45 (\$88 U.S.) to £50 (\$98 U.S.), the highest level in two years.

Ann Swain, CEO of the association, said that economic uncertainty could further

boost demand for contractors. "Banks may look to mitigate employment costs by putting a freeze on permanent hires, which often creates more opportunities for contract workers," she said.

Computerworld U.K. staff

BRIEFLY NOTED

Grantly Mailles, the former CIO for the state government of South Australia, has joined IBM's global services division in Melbourne. He was replaced in the state government post by Andrew Mills. Mailles had been the state's CIO for three years.

Rodney Gedda,
Computerworld Australia

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Better Mac Management Tools Weigh in Apple's Favor

Admin features become more PC-like, removing a roadblock to enterprise Mac use. **By Eric Lai**

AS A SENIOR technical support analyst at Harcourt Inc., Randy Rowles is happy that he gets to manage the educational publisher's 1,000 or so Macintosh systems. He's perhaps even a little smug about how their stability and ease of use helps simplify his job.

And with Harcourt's Mac support team needing fewer administrators relative to the number of installed systems than the Windows group does, "our TCO from a support standpoint has always been lower," Rowles said, referring to total cost of ownership.

But Rowles confesses to long feeling "a bit of envy" toward his Windows counterparts for one thing that they have had and he hasn't: a plethora of powerful but user-friendly tools for automating systems administration tasks. "It's always been an area of contention — like,

'How come they get this nifty tool?'" said Rowles, who works in Harcourt's Orlando office.

Now, though, the picture is different for enterprise Mac users and admins alike.

Apple Inc.'s use of Intel chips in Macintosh systems has made its machines more competitive with PCs on price/performance metrics. And software incompatibility issues between Macs and PCs have been rendered largely moot by the shift toward Web-based applica-

tions and the emergence of virtualization technology.

Perhaps not coincidentally, Mac usage is on an upswing, albeit a relatively small one. For instance, Net Applications Inc., which tracks usage metrics on about 40,000 Web sites, reported last week that the percentage of visitors to those sites using Macs increased for the third straight month in January, to 7.6% of all users.

Meanwhile, management tools vendors are boosting their cross-platform support and bringing the Mac administration features they offer closer to par with the Windows capabilities in their tools. That is making it much more feasible for IT staffers to automate Mac management tasks and administer PCs and Apple machines from a single console.

Late last month, LANDesk Software Ltd. rolled out Version 8.8 of its namesake suite of management tools. LANDesk said its software now lets systems administrators remotely control both

WHAT TOOLS ARE AVAILABLE NOW

■ **LANDesk Management Suite 8.8**, from LANDesk Software

■ **Altiris Client Management Suite 6.0**, from Symantec

■ **FileWave 3.5 and Asset Trustee 8.0**, from FileWave

■ **Apple Remote Desktop 3**, from Apple



GETTY IMAGES

Continued on page 12

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Microsoft



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Continued from page 10

Macs and PCs from a Macintosh-based console. The upgrade also lets users take more-detailed inventories of their Macintosh systems and the software that resides on them. LANDesk plans to add support for managing Apple's iPhone devices later this year, said Coby Gurr, a business line manager at the tools vendor.

According to LANDesk, its software is being used to manage more than a half-million Macs, in addition to a far greater number of PCs.

Harcourt, which became part of Houghton Mifflin Harcourt Publishing Co. through an acquisition in December, uses the LANDesk Management Suite to control its PCs and Macs.

Rowles noted that Harcourt's Windows systems administrators have been able to centrally manage the company's 4,000 PCs for years. For them, tasks such as tracking software licenses, enforcing group policies, and remotely deploying new software and patches are all automated. But in the past, Rowles and his fellow Mac admins were denied the same luxuries.

To track software licenses and updates on Macs, Rowles said, "we mainly relied on good record-keeping — spreadsheets." And deploying software "was a big pain in the butt. We would have to physically go from Mac to Mac to install software."

Now Rowles can use LANDesk's tools to do just about everything he needs to on Harcourt's Macintosh systems. "I'd say that 90% of the Windows features I need are available for the Mac," he said, describing the cross-platform capabilities of the LANDesk suite as the software's biggest selling

point for him. Rowles added that the improved management capabilities have helped Harcourt to further reduce its TCO on Macs. In the future, the company will likely increase the number of Macs it uses because of such savings, he said.

Michael Gonzalez, a senior IT analyst at Baylor University in Waco, Texas, agreed with Rowles' assessment of the LANDesk suite's cross-platform management capabilities. "For what I use it for, LANDesk is dead-on equal for Windows and Mac," Gonzalez said.

About 800 of the 6,300 systems used by Baylor employees or within its computing labs are Macs, Gonzalez said. He noted that LANDesk's nearly equivalent levels of support for PCs and Macs let the university's IT department have a liberal attitude toward different hardware platforms. And that is resulting in an uptick in Mac usage at Baylor, he said.

WHAT'S OUT THERE

Terrence Cosgrove, an analyst at Gartner Inc., said via e-mail that among management tools vendors, LANDesk is furthest along in supporting Macs. LANDesk's software "can do OS deployment, data [and] settings migration, software distribution, inventory and remote control for Mac machines," Cosgrove wrote.

But IT managers also have other options. For instance, Symantec Corp. offers the Altiris Client Management Suite, a cross-platform set of tools that it acquired last year when it bought Altiris Inc. The Altiris suite is being used by about 22,000 customers, according to a Symantec spokesman. He said that

THEN

“We would have to physically go from Mac to Mac to install software.”

NOW

“I'd say that 90% of the Windows features I need are available for the Mac.”

RANDY ROWLES, SENIOR TECHNICAL SUPPORT ANALYST AND USER OF LANDESK MANAGEMENT TOOLS, HARDCOURT INC.

Symantec doesn't have exact statistics on how many Macs are being managed with its software, but he added that Mac-related sales "skyrocketed" last year.

Altiris has supported Macs since 2002. Symantec introduced disk imaging and deployment features for the Apple systems last year, and the spokesman said "more-significant enhancements" are due late this year.

FileWave International Holding AG took an alternate path, first offering tools for managing Macs and then adding support for PCs three years ago. Ben Forsyth, CEO of FileWave's U.S. subsidiary, said that the company has sold licenses for managing more than 700,000 clients — about 80% of them Macs.

FileWave's largest customer is the Manatee County School District in Florida, which plans to use FileWave's software to manage about 14,000 Macs and 6,000 PCs. George Vensel, director of technology and information services for

the school district, said the deployment of the tools is about two-thirds complete. "So far, we believe that it's handling both platforms to meet our needs," Vensel added.

Another cross-platform remote-control option is Motorola Inc.'s Timbuktu Pro software. In addition, Apple has added features to its Apple Remote Desktop tool so users can remotely manage both Windows and Linux systems as well as Macs.

Several years ago, using Apple Remote Desktop to manage Macs alone was "possible, though not efficient," Rowles said. Since then, Apple has made improvements to the software. But it still relies on the Virtual Network Computing protocol, which many admins consider too insecure to use in corporate settings. As a result, Apple Remote Desktop largely remains a Mac-only tool.

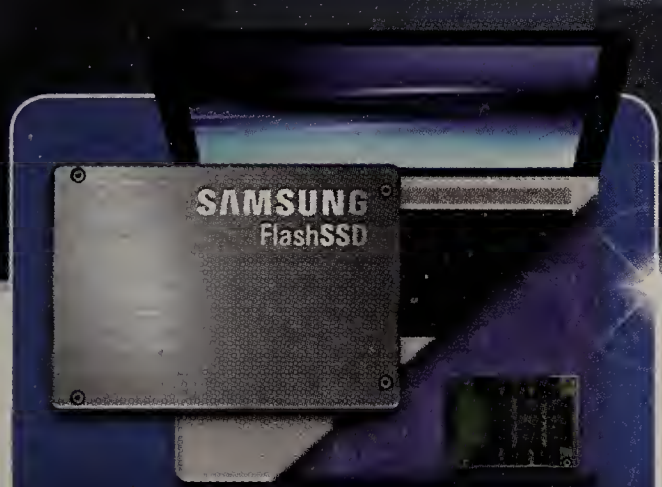
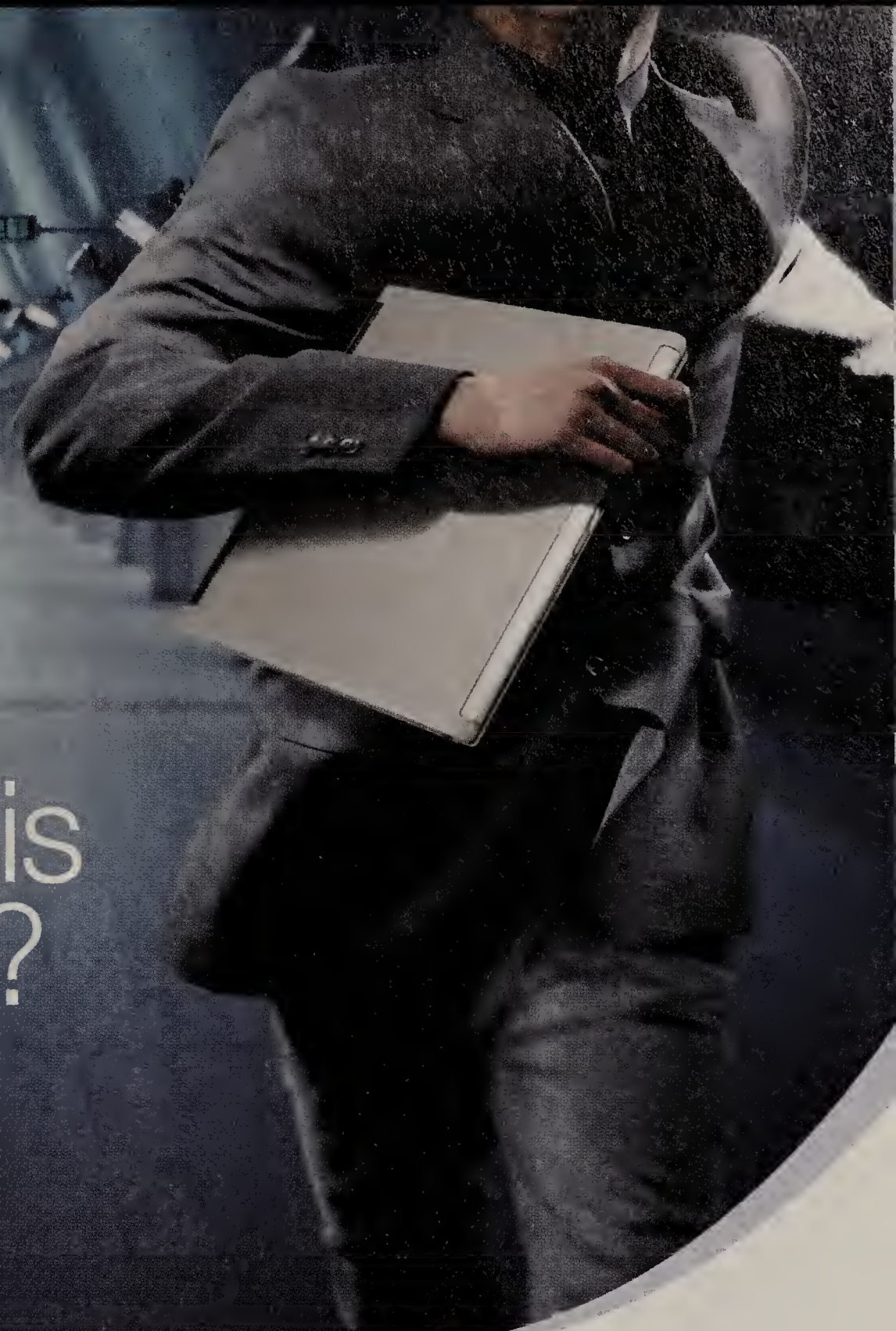
In general, the cross-platform tools don't have everything that users like Rowles want to see. He said LANDesk's software has shortcomings in its support for letting admins directly set group policies in Active Directory on PCs or Open Directory, the equivalent Mac technology. And Rowles is cautious about putting too much faith in LANDesk's new remote-software-deployment feature for Macs at this point. "It shows a lot of promise," he said politely.

Gartner's Cosgrove said another capability that most tools vendors have yet to make available on the Mac is targeted software distribution, which lets administrators deploy software to different users based on their business needs. ■

Gregg Keizer contributed to this story.

02.25.08

how solid is your drive?



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MICROSOFT CORP. didn't win many fans in online discussion forums when it decided last week to delay its first service-pack update for Windows Vista because of compatibility problems with some third-party device drivers.

But for IT managers, the fact that Service Pack 1 won't be released to users until next month — even though Microsoft has cleared it for manufacturing — may not be a big turn-off.

Corporate users typically wait for the SP1 release before they start widespread rollouts of a new version of Windows. And in the grand scheme of things, a six-week delay in the arrival of the Vista update likely won't matter to most companies.

In fact, it may be beneficial in the end for enterprise users and Microsoft itself.

"There's a big psychological element in [an SP1 release]," said Lee Nicholls, global solutions director at systems integrator Getronics NV. "It would be catastrophic for the future of Windows Vista if the service pack itself turned out to have major issues."

Most IT professionals had expected SP1 to arrive "sometime in the March time frame" to begin with, Nicholls noted. "So it's fair to say the delay is acceptable."

Collegiate Housing Services, an Indianapolis-based company that builds and manages housing for academic institutions, was quicker to deploy Vista than most businesses. It installed the operating system on all 78 of its PCs last year and has tested SP1 on eight.

Sumeeth Evans, Collegiate Housing's IT director, said the company didn't have any driver problems on the sys-



GETTY IMAGES

Users in Holding Pattern on Vista SP1 Because of Driver Problems

Microsoft released the Vista update to manufacturing — but not to users. That may not be a big deal for most IT execs, though. **By Eric Lai**

tems with SP1. But he wasn't fazed by Microsoft's decision. "I would prefer that Microsoft iron out the driver issues," Evans said. "We're willing to wait for six weeks, since most of our non-SP1 machines do perform pretty well."

Driver problems were the bane of many early Vista adopters, who complained about peripheral devices that wouldn't work with the

operating system after it was released early last year. Those complaints had died down, but last week Microsoft said that some SP1 beta testers had reported compatibility problems with "a small set of device drivers."

David Zipkin, a senior product manager at Microsoft, said that most drivers should work properly with SP1. But, he added, the soft-

ware vendor is "erring on the side of caution."

Zipkin blamed device makers for not strictly following Microsoft's specifications on how drivers should be written.

But Ian Lao, an analyst at In-Stat Inc., said that peripheral makers hate writing new drivers for existing products because it's difficult and may not offer an obvious financial payoff — particularly on devices that they have stopped selling.

As a result, many vendors cut corners by patching drivers instead of rewriting them from the ground up, Lao said. That can make the drivers fragile, he added.

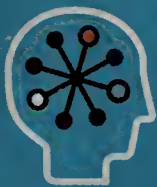
And Vista SP1 is no small update: It tips the digital scale at nearly 700MB of code. "In my mind, you've got to treat SP1 as an entirely new OS," said Paul Morris, a project manager at QualityLogic Inc., a software and driver testing firm.

Not all IT managers are sanguine about the delay. Gary Wilhelm, business and financial systems manager at Englewood Hospital and Medical Center in New Jersey, said he would have preferred to get access to SP1 right away. Wilhelm, who oversees about 2,500 PCs, said the medical facility plans to deploy the update on 30 systems as soon as it becomes available.

Other critical comments included ones posted on Microsoft's Vista blog, some by users identifying themselves as IT administrators.

But Nicholls said that even after SP1 ships, he doesn't expect "a huge boom in deployment" of Vista. In most cases, he said, the update's release will simply spur IT managers to begin planning their rollouts of the operating system. ■

225.08



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On the Mark

HOT TRENDS ■ NEW PRODUCT NEWS ■ INDUSTRY BUZZ BY MARK HALL



MATTHEW FAULKNER

87%

Portion of help desk calls related to IT system changes, per Gartner Inc.

Planning With Uncertainty

PALM DESERT, CALIF.

PROJECT PLANNING software has proved itself a useful but not particularly precise tool for predicting when a project will come to fruition. That may change with the beta release of LiquidPlanner (free for now), announced here last month at the Demo '08 conference. According to Jason Carlson, vice president of engineering at LiquidPlanner Inc. in Bellevue, Wash., the software embraces what other project planning programs eschew — uncertainty

— by letting each task owner give a range of time that his portion will take to complete. Carlson claims that the linear regression math in the software can then calculate a true delivery date with 98% probability.

74%
Percentage of projects that fail, according to the Project Management Institute.

That's way better than any tool currently on the market, says CEO Charles Seybold. He adds that when a project manager

sees each task's range of uncertainty and the cascading effect it can have on a project, he can decide where and when to distribute resources to keep things on track. The hosted service captures all of your projects' histories so you can review how well similar projects or teams performed in the

past. Ironically, neither gentleman would predict when the LiquidPlanner project would be completed.

Virtual Testing For IT Operations

Most problems that hit smooth-running IT operations occur after a change to the production system. Any change — a security patch, a router configuration shift, an application upgrade. You know that. That's why IT shops often invest in test systems that exactly mimic those in production. But not often enough, says Jonah Paransky, vice president of marketing at StackSafe Inc. in Vienna, Va. "Companies just don't do it," he says, because keeping a test system in sync with the production environment takes too much time, staff and

money. But StackSafe claims that it can help. The StackSafe Test Center uses the Xen hypervisor to build a virtual testing world that lets you import your "entire production system" with a mouse click, says Andrew Gross, chief scientist. With Test Center, you can see how changes affect everything from performance to reliability. It works with Linux-based applications, and this month Windows 2003 will be the first of several environments to be added. Subscription pricing starts at \$50,000 per year.

With Databases, Less Is More

When you're trying to get at something in a hurry, it helps to know where not to look. That's the theory behind BrightHouse, an analytical data warehouse engine from Info-bright Inc. in Toronto. CEO Miriam Tuerk says BrightHouse digests data from existing databases and compresses it at a 10:1 ratio, creating a "knowledge grid" made up of "data packs." The grid stores basic statistics and metadata about the information in the data packs. But most important, says Tuerk, the grid



Tuerk: Get faster data warehouse responses by searching only in the right places.

keeps track of the relationships among the data. BrightHouse then searches only data packs where relationships to a query exist, resulting in dramatically faster response times. Tuerk adds that BrightHouse, which uses

MySQL as its core database, works with many popular analytic packages, so end users needn't learn a new query tool. And since BrightHouse can handle ad hoc queries, IT doesn't need to create new data marts, indexes and data cubes, she contends.

BrightHouse 3.0 will be available in early Q2. Pricing begins at \$40,000 per terabyte. ■

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Dossier

Name: Edgar Masri

Title: President and CEO

Organization: 3Com Corp.

Location: Marlboro, Mass.

Most interesting thing people don't know about him: "I listen to and learn Chinese on my iPod Touch while downhill skiing."

Favorite technology:
The iPod Touch

Last book read: *Making the Foreign Serve China: Managing Foreigners in the People's Republic*, by Anne-Marie Brady.

Favorite vice: Staying in a hot sauna longer than 20 minutes

Favorite pastime: Traveling to exotic locations

Philosophy in a nutshell:
"Whether you believe you can do a thing or not, you are right." – Henry Ford

■ THE GRILL

Edgar Masri

The **3Com CEO** talks about the **Bain buyout**, the **China connection** and playing on a field dominated by **Cisco**.

Edgar Masri rejoined 3Com Corp. in August 2006, after six years at Matrix Partners, a venture capital firm. Prior to that, he had been general manager of 3Com's network systems business unit. Last September, 3Com announced that it is being bought by Bain Capital Part-

ners LLC, a private investment firm, for \$2.2 billion in cash.

What does 3Com do best, and what does it need to improve? What we do best: 3Com started as a great Ethernet company with Bob Metcalfe, and we

provide networking equipment that is high quality, low cost and easy to use.

We've taken advantage of the rise of China with the proliferation of low-cost talent there. In 2007, 3Com acquired 100% of the former joint venture with China-based H3C Technologies. We're also very diversified geographically. In China, we're in three cities; we're in India; and we're in Austin and Marlboro in the U.S.

We clearly need to improve the way we tell our story. There have been many changes, which makes it more critical to send the message [about] who we are. I try to stress [that we should] approach customers as the leading provider of high-quality, low-cost networking gear that is open to a variety of applications out there. More and more customers buy applications and look at the network as plumbing. We also feel it should facilitate choice and flexibility.

Talk about the H3C joint-venture strategy in China. The strategy involved access to the market and to talent, which can be obtained for one-fourth of the cost

Continued on page 20

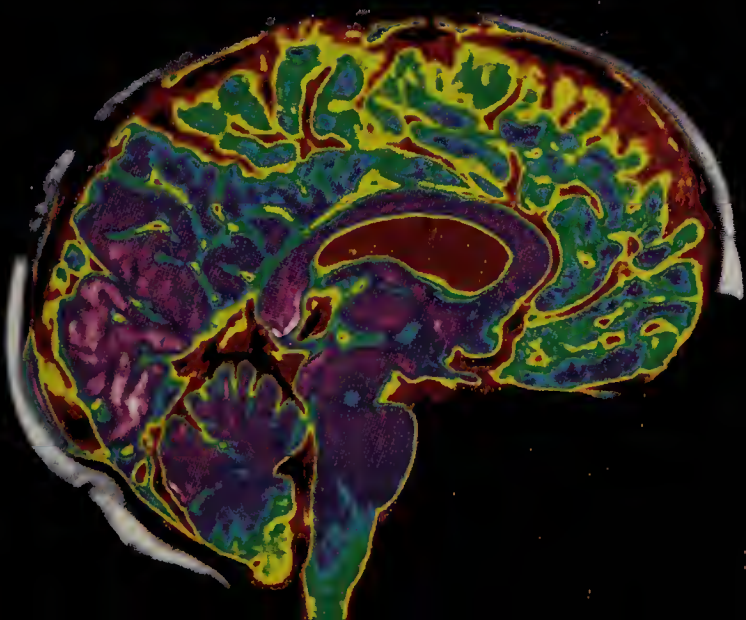
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“The U.S. and Asia are coming together. The way to success is to bring talent from both sides.

Continued from page 18
as in the U.S. More than a third of our employees have graduate degrees there.

You are reportedly learning Mandarin. My Mandarin fluency is not there yet, but I'm practicing it extensively to make myself understood. Now I'm focused on learning Chinese characters. You must learn 3,000 characters to read the newspaper, and I'm halfway there.

It must be hard to build trust in China. Yes, absolutely. Like any relationship, trust has to be built over time. It helps to spend time and to rely on people

who are known to both parties.

When I go to China, it's valuable to stay there for more than two days of business. Once, I stayed three weeks, and six weeks another time. These were extremely valuable stays because I got to know the people and more of the country and appreciate what they deal with. We also encourage people in China to spend time in the U.S.

How much are you relying on videoconferencing rather than travel? We have used it for weekly staff meetings that involve all the members of the executive team, and it helps.

Cisco Systems is repeatedly touting videoconferencing and other forms of video as a future source of major revenues.

What is 3Com's attitude toward video? We concur that video is an important application. We have hundreds of engineers in China working on video. With our success in the education market, universities have come to us, and it's a powerful way to track activities throughout a campus or at a bank.

Has your Linux strategy helped against competitors? We have an open strategy, which is open-source based on Linux. Many networking companies are starting to do that, but I believe we have an 18-month head start. We recognize customers want open architecture and source, mainly in small and medium businesses. We also have the Open Services Networking architecture.

Why do customers want open source? It is low cost, with customers paying us insurance to get support coverage, and they do it to gravitate their network around an application. Smaller enterprises are finding open source is providing them applications, and we are an enabler. It's different for larger companies, but we also support a large number of enterprise applications and are very scalable with them.

Cisco has a 70% share of the routing and switching market. What are 3Com's plans on the competitive front? While Cisco is a great company, there are areas of the world where we can serve the market and change the rules of the game. China, by all accounts, is where

there's a much closer battle with Cisco than anyplace else. Cisco is global, but not necessarily as strong in Latin America, Brazil and Mexico. 3Com has a long-standing investment plan based on high quality, low cost and openness. Those work best in emerging markets, with medium-size companies on a more constrained budget.

We believe there are other parts of the world that will [enable] 3Com to become a leader or a clear alternative to Cisco, such as Eastern Europe and Russia and India.

Some customers aren't clear on what's happening with the Bain Capital move.

What can you tell us? Bain Capital and the 3Com management team are very much aligned toward building a great leader in networking. That was at the source of our decision.

Customers should feel more engaged and excited [about] healthier financials, higher-quality and lower-cost products than the competition, and with a message that's more consistent than in the past.

Does going private also mean you escape the tyranny of the public quarterly report, and that you have more time and flexibility to innovate on new products? I personally feel that the most important point is our commitment to our mission. We are building a company that has very few equivalents — trying to bring East and West together. This is *the* trend. The U.S. and Asia are coming together. The way to success is to bring talent from both sides.

What will be the cool technologies from 3Com in the next few years? Something that is transforming the industry [is] the advent of multicore chips. It will revolutionize the way technology is done. In our space, it means video multistreams. If you have multicore in security, it is a tipping-point product. Customers want more of their traffic verified and tested and checked, which means you need multicore technology. You can allow customers to do more with a fixed budget.

Will you have that capability in products in two years? Earlier.

— Interview by Matt Hamblen

The Business of IT

Best practices, theories and technologies for managing agility and alignment, collaboration and intelligence, power and networking.

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Leveraging Information

2.18.08

Tapping Business Intelligence Now

There's a lot of data out there, but using it wisely is a challenge.

Business intelligence (BI) doesn't have to be a pie-in-the-sky, big-bang, strategic project that takes years to perfect before it generates a return. For those who get it right, the benefits can be as close as your nearest cash register, as immediate as your next purchase order and as dramatic as capturing thousands of dollars in lost revenue.

Getting results requires an understanding of what really drives profit and loss in your business, a willingness to keep learning about and training your users in business intelligence, and the ability to move quickly and to question conventional wisdom.

For those who do BI right, the results go beyond short-term improvements in efficiency and profits to long-term cost savings and strategic changes that boost earnings.

That's not to say that implementing BI is simple or easy for every organization. It's all too easy to get tripped up by technical, training or cultural issues. One challenge is the seemingly straightforward process of agreeing on common terms. Another is misinterpretation of data if managers focus only on numbers and ignore business processes.

Ideally, BI changes the corporate culture so that every manager is responsible for his own budget, every sales agent knows what he needs to do to improve his performance, and every employee knows how the company is doing on an almost-constant basis.

➤ This Executive Briefing looks at the theory and practice of data-driven decision-making. We talk with experts and examine successful implementations of information management technologies. www.idgtechguides.com/cwprint

Corporate BI Use

BI in place - not looking to add to it

No BI - not looking for a product

Large Companies (1,000+ employees)

40%

QuickPoll

The biggest business intelligence problem in my organization is:

on business essentials and users in - analytic tools.

Getting to Green

2.1808

For many companies, using electricity is either a matter of saving money or saving the environment. But for some, it's a necessity. They simply can't get enough power to heat or cool their IT infrastructures at any price. What to do?

Storage strategies such as information life-cycle management and data de-duplication can reduce energy needs. Server consolidation and virtualization allow IT to manage — and power — fewer machines. Using power management utilities, already available on almost every server, can cut data center energy requirements significantly.

Some organizations are looking to technologies such as solar panels to provide power. But this can be a tough sell because solar power can require a six- to eight-year payback period, far longer than the two- to three-year return on investment many companies require. Still other users are looking to reduce their power needs by changing the design of the buildings that house their data centers.

Meanwhile, other organizations are looking beyond energy consumption to make their operations green. They're considering how IT equipment will be disposed of and developing ways to reuse and recycle old gear without releasing toxins into the environment.

Whatever the approach an organization takes or the amount of effort it puts into going green, any environmental initiative must also produce a business benefit — usually in the form of lower costs — to become an ongoing part of the company's strategy and corporate culture.

➤ In this Executive Briefing, we provide tips and tricks to help reduce power consumption, waste and chaos.
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Governance & Risk Management

Making Business Sense of IT

Align IT and business. Use assets and people effectively. Reduce risk. Run a transparent IT operation. Those are the goals. The name is IT governance.

When implemented correctly, IT governance keeps IT organizations focused on the right projects. It makes them more efficient at executing those projects, and it forces better tracking of assets and resources.

IT governance should mean that a company has brought business know-how into its IT group. A company that has successfully implemented an IT governance program will no longer have an IT shop that operates as if it is on its own island.

The goal of IT-business alignment is to help the organization reach its goals by improving the outcomes of IT initiatives. A poorly aligned IT organization is one that's unable to respond to ever-changing business needs.

Project management is just one of several IT management fields that come together under the broad umbrella of IT management. Today, it also includes change management, application life-cycle management, asset and resource management, portfolio management and, often, security management.



What Makes a Turnaround CIO?

COMPANIES WANT TO HAVE THEIR CAKE AND EAT IT, TOO? says Marc Lavin, CEO of the IT consulting firm, Lavin & Associates. He discusses how a CIO can lead a company through a turnaround.

➤ This Executive Briefing discusses many of the nuts-and-bolts issues relating to aligning business and IT goals. From keeping major IT projects on track to disaster recovery and from turnaround CIOs to metrics and employee development, real-world examples illustrate the best management practices. www.idgtechguides.com/cwprint



_INFRASTRUCTURE LOG

_DAY 69: All we need is one specific piece of info. Gil almost had it, but his hand cramped. How are we supposed to find trusted business information when these massive volumes of conflicting info keep pouring in?

_Gil just grabbed a stuffed panda.

_DAY 71: The answer: IBM solutions for leveraging information. Now we can cleanse info and standardize source data fields for consistency and accuracy. I can create a single, accurate and unified record of info across our source systems. Everyone can make better decisions.

_Just in time—I think we ran out of quarters.



Information Management

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2.18.08

Teaming Up for Work

Users are becoming better acquainted with the benefits of collaboration tools in their personal lives and are eager to put them to use in the workplace. This enthusiasm, if channeled correctly, can lead to great benefits for organizations.

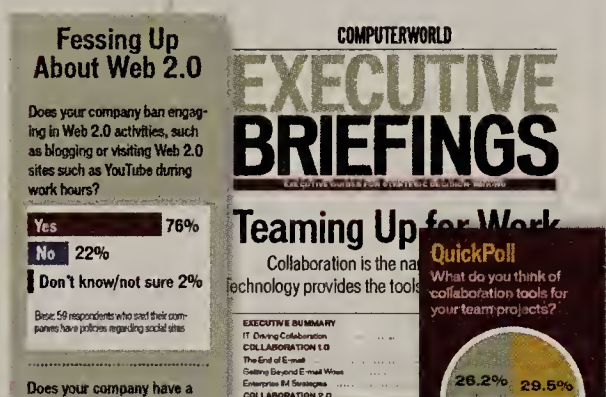
Today, many companies think of collaboration in terms of their legacy applications that allow users to share calendars, edit documents via whiteboards and tap into one another's e-mail folders. Newer offerings take collaboration up a notch, allowing users to share opinions, co-create project-based Web-sites, aggregate feedback and build profiles based on expertise.

Tools such as instant messaging, social computing, blogs and wikis can kick group projects into high gear among enterprise users. They provide increased productivity and knowledge-sharing for real-time collaboration.

Without guidance from IT, these tools can also pose a significant threat to organizations. The real win will come when IT teams play a role in the selection, deployment and management of collaboration platforms.

The reason is simple: In an era of privacy concerns and compliance restrictions, collaboration efforts must be protected by network security and policy. The more IT is involved in managing these new tools, the less likely it is that security breaches will occur.

➤ New technologies have revolutionized the way enterprise teams work. This Executive Briefing explains how to get the most out of your workforce using collaboration software, messaging suites, Web 2.0 and other software tools.
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Enabling Business Flexibility

Managing for Agility

When a national retail giant tailors the product mix and even the look and feel of individual stores to the needs of neighborhood customers, that's agility. When nontechnical users can deploy and tweak product promotions on the corporate Web site without help from IT, that's agility. When a consumer goods manufacturer changes product design on the fly as it gets feedback from customers, that's agility.

For a large, complex organization, agility means more than merely responding quickly to change. It requires quickly and accurately detecting changes in the business environment, creating appropriate responses to those changes, communicating and implementing the new strategies across the organization, and then monitoring and modifying those strategies as needed over time.

Becoming agile requires changes in culture and business processes. Executive sponsorship is critical to force sometimes competing business units to work together and to share information in ways they normally wouldn't. Agile software-development methodologies require business managers to commit more time and effort to software development than they might normally.

Agile IT operations can deliver products and services promptly, and they can update and improve and reconfigure those resources as need be. But only good management practices will keep it all working together.

Going agile a challenge. But it's not impossible.

➤ Today's corporations need to bend without breaking. In this Executive Briefing, we look at best practices for providing and managing IT in an on-demand world.
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_INFRASTRUCTURE LOG

_DAY 82: There are so many risks out there. Traffic spikes, natural disasters, mergers. How do we prepare? One in three companies don't recover from unplanned downtime.¹ Would we?

_Gil wrapped everything with bubble wrap. Just to be safe.

_DAY 83: I'm preparing with IBM Business Resilience Solutions. IBM Business Continuity Services help us assess our risks and design a proactive plan to deal with them. IBM Tivoli gives us the visibility to diagnose and fix infrastructure problems. And the robust availability features of the IBM System p™ give us maximum uptime.

_No more bubble wrap. And I have to mail a package. Great.

2.18.08

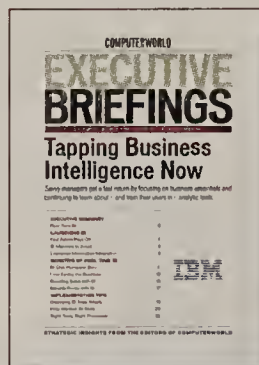


Tivoli

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Tapping Business Intelligence Now

Executive Summary

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- BI Mistakes to Avoid
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- Wanted: New Technologies
- IT Clears the Road
- Tools and Resources from IBM



Making Business Sense of IT

Executive Summary

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Managing Alignment

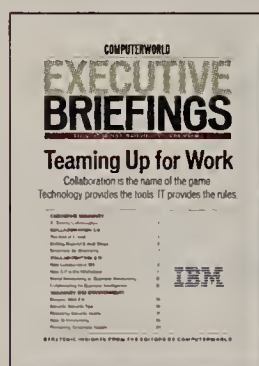
- Natural IT-Business Alignment
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- Service-Oriented Architecture
- Vendors on On-Demand
- Real-Time Sharing
- Thin-Client Provisioning
- Tools and Resources from IBM for Managing an Agile Business

The IBM logo is located in the top right corner of the advertisement. It consists of the letters "IBM" in a bold, sans-serif font, with horizontal stripes running through the letters.

_INFRASTRUCTURE LOG

_DAY 89: Our power and cooling costs are out of control. We spend the bulk of our IT budget just keeping the data center cool. I told Gil we need to go green in a big way.

_DAY 91: Gil took us green...kelly green, to be exact.

_DAY 93: You don't go green with paint. You go green with IBM Cool Blue™ technology and energy management services. Advanced server and storage virtualization can help consolidate our boxes to lower energy usage. And the new IBM POWER6™ systems help us use less energy doing the same amount of work.¹

_Our data center will be green now. And painted white.

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_INFRASTRUCTURE LOG

_DAY 84: Feeling really disconnected. We're not getting the most out of our existing assets. Service and application integration is a nightmare. We've got to stop working on these islands.

_Please rescue me from this lack of connectivity.

_DAY 87: We're saved! With IBM WebSphere solutions we can service-enable and connect our existing assets for mission-critical goals. Now we can reuse existing applications and save money by eliminating redundant systems. We're ready for any SOA integration project.

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Bruce A. Stewart

Tough Times Mean Tough Choices

GROWTH IN U.S. IT spending is lower than it was even at the depths of the post-Y2k and dot-com bust; it's projected to barely kiss 3% this year. That's not enough to cover salary and benefit increases, much less vendors' maintenance-fee upticks, infrastructure recycling or new projects. Hard times, and hard choices for CIOs.

Making hard choices is what CEOs expect of their subordinates. CEOs have the responsibility of doing what's right for the company as a whole, and they want everyone to share that mind-set. If you don't, they'll get someone who does.

So, what are the hard decisions you should be making?

If you don't really need it, get rid of it. Not one penny in license or maintenance fees should go out the door for marginal products. They all have their defenders among your colleagues, but that's too bad. To do anything substantial in a downturn, you need to find money. This is your source.

If you don't really need it, don't buy it. In its last years, DEC seemed to regularly hold fire sales in May and June. As sales slow this year, a

lot of vendors are likely to do the same and offer deals. As attractive as it is to seize a bargain, buy only what you really need. You should be asking yourself whether new equipment will save operating costs, not what features it would add.

Don't do something just to appease your peers. IT executives often say that IT is the only group that sees the whole enterprise. But how many CIOs actually turn down their peers' requests for new projects by saying, "That's not in the interests of the cor-

■ **As IT spending projections plummet this year, it's time for CIOs to stand firm, like Henry Fonda in *Twelve Angry Men*.**

poration at this time"? Your actions should show that you really do see the whole company, and the big picture, just as your CEO would.

At least 10% of your current portfolio is unnecessary. Find it and shoot it. Every IT organization I go into has great chunks of its portfolio that should be sent to the big bit bucket in the sky. Demonstrate your seriousness and wipe out a duplicate package, as well as old, stand-alone reporting routines and analyses that your business intelligence tools could handle.

Tackle your biggest problem child. For some, that's an infrastructure that costs too much. For others, it's a messy set of bridges connecting packages whose vendors overlap. In still others, it's software that didn't change when the busi-



ness model did, leaving you with work-arounds galore. Focus on the problem, show how it will make a real difference to enterprise costs, and force the issue at the top. Then devote your best people to it, design a fast track to the first wave of delivery, and get those pieces in place this year. Once you get your way, you have to put the results on the table.

And for a lesson in standing firm during difficult times, take the time to watch the 1957 movie *Twelve Angry Men*. In it, Henry Fonda stands against 11 other jurors, all of whom just want to vote guilty and go home. His character's drive to see justice done on behalf of the community as a whole is a good model for what CIOs need to do on behalf of the enterprise.

The next few years will be just like this one. Delivering better services at sustained lower IT costs will make you a CEO in development. There's your path back. All you have to do is take it. ■

Bruce A. Stewart is CEO of Vancouver, British Columbia-based Accendor Research Inc., an advisory services firm focused on management issues in the technology-enabled enterprise. He can be reached at bruce.stewart@accendor.com.



"There's a lot of ROI out there. If you spend just a bit of time looking, you can find it."

TRACY BLACK, SENIOR VICE PRESIDENT OF IT, J.B. HUNT TRANSPORT SERVICES INC.

Xtreme ROI

Four projects with payback that blew the doors off. ■ By Mary Brandel

IT HAS BECOME A CLICHÉ to talk about IT project cost overruns and blown deadlines. When an IT project achieves a good return on investment, that's news. ■ But particularly in tough economic times, starting a project without knowing whether it will reap returns can be a foolhardy, if not career-ending, proposition. ■ To achieve high ROI, you have to know the key elements that help create it. You also have to be willing to take out the calculator and prove it. "There's a lot of ROI out there," says Tracy Black, senior vice president of IT at J.B. Hunt, one of the largest transportation logistics companies in North America. "If you spend just a bit of time looking, you can find it." ■ We asked four companies with super project returns how they did it.

1

COMPANY: Animas Corp., a Johnson & Johnson company that manufactures insulin pumps

PROJECT: Streamlining order management in the sales call center

DURATION: Four months

COST: \$20,000

ROI: \$250,000 per month in labor savings and increased sales

Untangling business processes is one of the most satisfying things that IT can do, especially when it yields unexpected benefits. Just ask Jean Campbell, a business analyst at Animas, and Bogdan Butoi, the

West Chester, Pa.-based company's chief technology officer. They knew they'd get labor savings of up to \$40,000 per month when they revamped Animas' order management processes with a new outbound calling system, real-time reports for call center representatives and a wizard-based order-taking script. But they didn't anticipate streamlining the process so effectively that reps would be able to process 2,000 more orders per month.

The outbound calling system replaced a manual process that required more than 10,000 calls per month to remind customers to reorder insulin supplies. By spending \$10,000 to automate this process with a voice-over-IP system that runs on Animas' existing voice network and then integrating it with the company's homegrown customer relationship management system,

the IT group freed up 33 additional staff days per month that could be re-allocated toward processing orders.

Success was immediate, Campbell says. The day the system was launched, the shipping manager came upstairs to the order department, demanding to know why she was suddenly handling 200 extra orders. "That piece came as a surprise," Butoi says.

The additional \$10,000 went toward designing and implementing a wizard-based system that standardizes the order-taking process, reducing average call times from five minutes to three. An automated validation script verifies prescription and insurance information in customer records, eliminating another manual approval process.

Finally, real-time reports enable reps to see orders in their queues that are unfilled because information is missing. Previously, reps couldn't see that until a daily report was issued.

KEYS TO SUCCESS

■ **Accurate analysis** of where the order management process was bogging down. "We spent a lot of time with users, and we created a lot of iterations of the wizard," Campbell says.

■ **No false deadlines.** "We said we'd implement it as soon as it was ready," Butoi says.

■ **Extensive testing** of the outbound calling system, resulting in a bug-free release. "Patients immediately bought into it," Butoi says. "It [had] their confidence from the very beginning."

2

COMPANY: ADP Dealer Services, a supplier of hosted and on-site ERP systems for automobile and truck dealers.

PROJECT: A data warehouse/business intelligence program

DURATION: One year to implement the system and complete the first project

COST: Less than \$500,000

ROI: 500% over a three-year period

When ADP Dealer Services began its BI program in 2005, it was more of a calculated risk than a sure bet. "It required the field service group to take a chance on the investment," says Jim Foote, vice president of development and field technologies at the Hoffman Estates, Ill.-based company.

So after a year of cleaning data, creating metadata and building a data warehouse, there was a sigh of relief when the first project saved the field service group an instant \$500,000.

That win was due in part to the business analysis Foote's group did to identify what would really resonate with users to stir some early enthusiasm. "The lesson learned was there was no big-bang ROI but a series of consecutive smaller wins," he says.

Since then, the system has supported decisions in product direction and penetration, pricing, and customer support and service. It has boosted profit margins nearly two percentage points for the \$1 billion business.

ADP began its BI effort when field engineers complained that they were making too many decisions based on

subjective data. Specifically, they were overbuying disk drives for the 5,000 servers they maintained for clients. When a vendor announced that a drive was reaching the end of its life, the field service group would buy spares without having an accurate idea of how many were really needed.

Foote realized that other areas of the company were in the same boat, so the BI plan was hatched. His group built the system using Ascential enterprise integration tools from IBM and BI products from Microsoft Corp., including its ProClarity analytics tools and SQL Server. Now, field engineers can see exactly how many drives they have from each manufacturer, as well as their failure rates and age, so they can forecast how many they'll need to buy.

Major challenges included cleansing 20 years of data; educating the business on the benefits of metadata, data standards and consistency; and convincing users of the benefits of looking at data in three dimensions rather than in the traditional rows and columns.

KEYS TO SUCCESS

■ **Extensive business analysis.** Foote's group identified functions to show off the range of what BI can do and provide early wins for users.

■ **Top executive buy-in.** There was executive sponsorship and a close partnership with the field service group, which funded the project.

■ **Endless education.** IT had to persuade users to abandon their spreadsheets and trust the BI tools.

How to Wow The Bean Counters

Get the requirements right. When you thoroughly analyze and understand business processes, you can pinpoint exactly where improvements should be made, dramatically upping the chance of developing a system with high payback.

Don't release until it's ready. The best way to instill confidence – and ensure fast adoption – is to release a system that's bug-free. You can't get returns if no one trusts the system.

Get to know users. Spending lots of time with users increases IT's understanding

of what they need to boost their productivity – and the system's ROI.

Rope in top execs. When your project hits the inevitable bumps in the road, you need the buy-in of the top brass to smooth the way.

Experiment. You should implement systems with known ROI, but it pays to apply some resources to R&D. That's often the source of surprising big-bang returns.

Do the math. Go in with hard ROI numbers and audit them along the way.

– MARY BRANDEL

3

COMPANY: J.B. Hunt Transport Services Inc.

PROJECT: A management system for invoicing

DURATION: One and a half years to implement the system and complete the first project

COST: About \$2.9 million

ROI: \$5.9 million through 2007, through increased revenue, labor savings and faster payments; estimated return of \$19.7 million by 2010

Lowell, Ark.-based J.B. Hunt's "perfect invoice initiative" began when the IT group applied a corporate score-carding process to the invoicing system, revealing a rise in overdue

Continued on page 34

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Continued from page 32

and delinquent bills. Then a three-day cross-functional brainstorming session identified several changes that needed to be made to systems, business processes and employee roles.

A major problem was the lack of integration between the sales system and the billing system. Customers might get billed at the normal rate rather than special rates they had negotiated with their salespeople, for instance, resulting in dissatisfaction, lengthy disputes and possible write-offs.

Another problem was the laborious process of billing for driver delays at customer facilities. If a truck is kept waiting to unload for a certain time

The biggest challenge, she says, was creating a unified customer profile from the multiple customer databases that J.B. Hunt had accumulated over the years. "We didn't have the data about customers all together from a national account perspective," she says. In fact, her team had to eliminate 500,000 duplicate customer codes.

KEYS TO SUCCESS

■ **Cross-functional teams.** These identified priorities, enabling IT to deliver incremental improvements and start getting returns quickly.

■ **Strong executive sponsorship** and monthly steering committee meetings.

■ **Quarterly ROI analysis and updates.** The engineering team did a full ROI

formation until year's end, when they were no longer able to manage the risk.

The rep knew that Hygeia had access to this information, since it could see medical claims involving high-risk diagnoses, such as cancer, heart disease or premature birth, as they were processed in its own system.

CIO Rod Hamilton's group realized that they could easily create an early-warning system that was also compliant with health care privacy laws. The stop-loss carriers were so impressed with the demo that they agreed to decrease their fees for any of their clients that chose Hygeia as their service provider, creating a new revenue stream.

"They became our sales channel, in

"Patients immediately bought into it. It [had] their confidence from the very beginning."

BOGDAN BUTOI, CTO, ANIMAS CORP.

period, delay charges may kick in, but these were difficult to track.

The piece of the project with the biggest ROI was the system the IT group created to detect and track delays and warn customers when shipments are about to exceed the allowable unloading time. It uses workflow technology and satellite-linked computers installed on J.B. Hunt trucks. The system reduces delays and eliminates the need for specialists to execute 38 manual steps and navigate a maze of 13 mainframe screens, e-mail documents and printed customer requirements to process a delay charge.

This system has an internal ROI of 124% and will add \$1.03 million annually to the bottom line, including \$870,000 in previously uncaptured revenue for valid charges and \$192,000 in staffing reductions, Black says.

The other piece of the project entailed confirming customer rates as defined in contracts and pushing them through to the billing system. IT created a Web bot to enter information into customers' Web sites after loads had been delivered, ensuring proper and timely payment. This yielded \$2.3 million in increased revenue and \$500,000 in labor savings — both thanks to a decrease in write-offs. Moreover, timely payment of invoices has resulted in \$932,000 in savings, Black says.

study before beginning the project and audited that data as business processes changed. "We put hard numbers in on the front end, and we've actually achieved a higher return than we projected," Black says.

■ Extensive training and testing.

4 COMPANY: Hygeia Corp., a provider of cost-containment services to insurers

PROJECT: An early-warning system to help stop-loss carriers better control their financial exposure

DURATION: Less than one month

COST: About \$5,000

ROI: \$500,000 in revenue in first year

The excitement was palpable when the IT group at Miami Lakes, Fla.-based Hygeia created a proof-of-concept model of a system suggested by a marketing rep looking for new ways to sell the company's services.

Through conversations with stop-loss carriers — companies that provide insurance to insurance carriers to cover extremely high-cost claims — the rep thought he had discovered a profitable niche: The stop-loss carriers said it would be valuable if they could get advance warning when one of their clients was facing an expensive claim. They typically didn't learn this in-

a manner of speaking," Hamilton says. "They won because, by reducing their prices, they could be more competitive, and the clients won because their premiums were lower." The result: \$500,000 in new business for Hygeia in the first year the system was used.

The system was inexpensive to build because, back in 2000, Hygeia had invested in a modular development strategy based on what would become Microsoft's .Net technology.

Because it had chosen to develop hundreds of discrete bus objects rather than large-scale applications, Hygeia could use already-built components for things such as generating secure e-mails, querying claims and encrypting data. "If that library of components didn't exist, the ROI wouldn't have been the same," Hamilton says.

KEYS TO SUCCESS

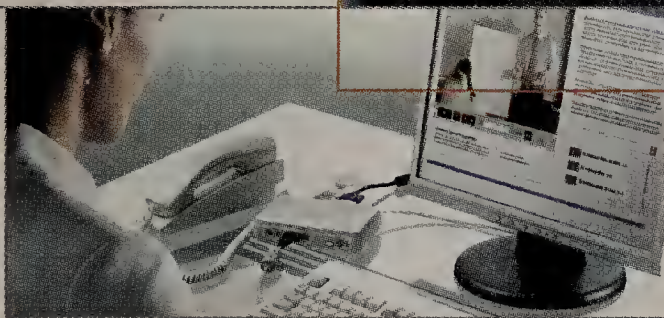
■ **A service-oriented architecture.**

Because IT could tweak already-built components, development costs were very low.

■ **A trusting relationship with business users.** There was a strong history of a good working relationship.

■ **Willingness to engage in proof-of-concept work.** ■

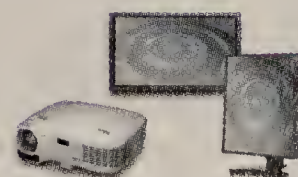
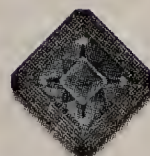
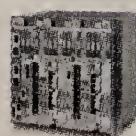
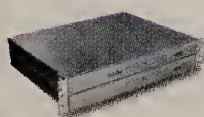
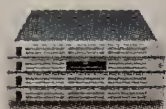
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Microsoft's Surface computer is designed to be used by several people at once.

PHOTO COURTESY MICROSOFT CORP.

The Touch Of Tech

Touch interface technology has been around a long time, but it may be at a tipping point. Move over, keyboard and mouse! **By Gary Anthes**

IS THE WIMP'S dominance about to end? Windows, icons, menus and pointing devices have constituted the main human-computer interface for some 15 years. The keyboard, mouse and display screen may not disappear,

but technologies based on human touch and gesture are on the rise. Robert Jacob, a computer science professor at Tufts University in Medford, Mass., says touch is just one component of a booming field of research on "post-WIMP interfaces," a

broad collection of technologies featuring what he calls "reality-based interaction." They include virtual reality, context-aware computing, perceptual and affective computing, and tangible interaction — in which a computer directly recognizes physical objects.

"What's similar about all these interfaces is that they are more like the real world," Jacob says.

A good example of reality-based interaction is the iPhone. "It uses gestures you know how to do right away," such as touching two fingers to the surface of an image or application and then pulling them apart or pinching them together to zoom in or out, he says. "Just think of the brain cells you don't have to devote to remembering the syntax of the user interface." In particular, Jacob says, the ability of the iPhone to

handle multiple touches at once is a huge leap past the single-touch technology that dominates in traditional applications such as ATMs.

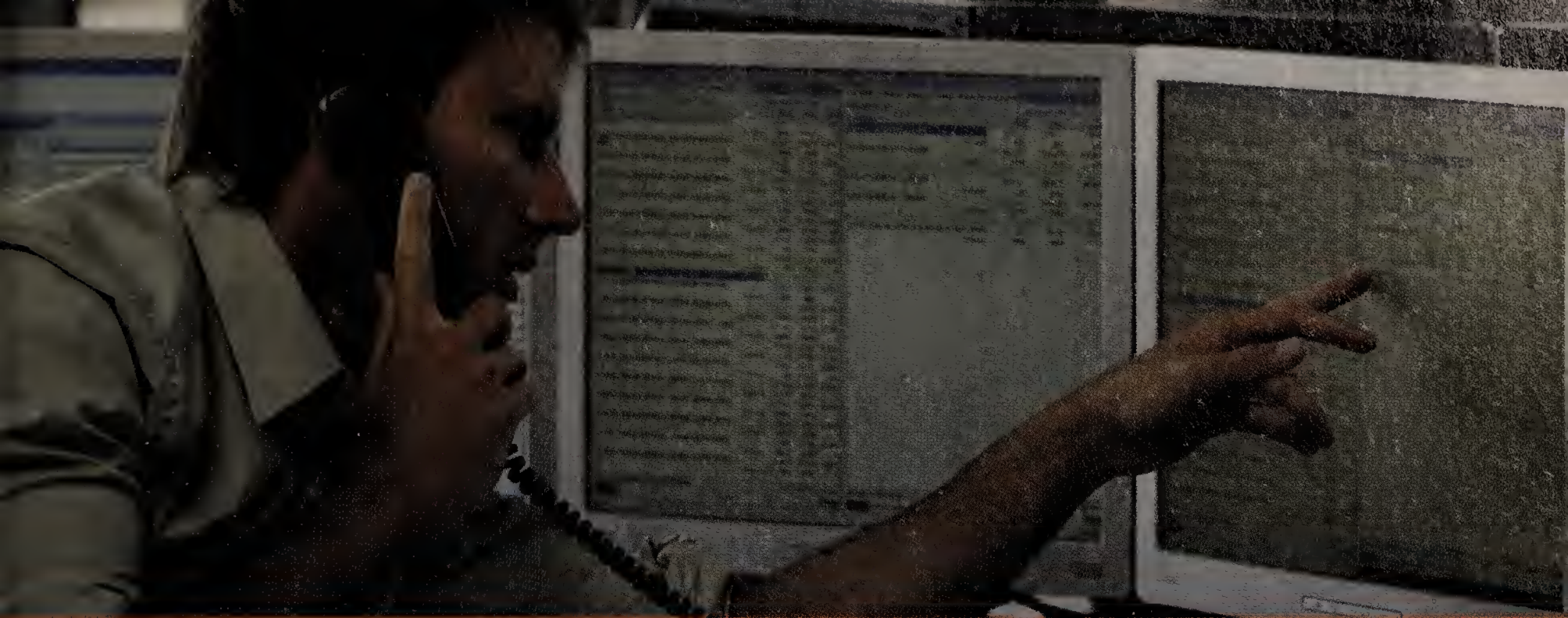
Although they have not gotten much traction in the marketplace yet, advanced touch technologies from IBM may point a way to the future. In its Everywhere Interactive Displays project, IBM mounts projectors in one or more parts of an ordinary room and projects images of "touch screens" onto ordinary surfaces, such as tables, walls or the floor. Video cameras capture images of users touching various parts of the surfaces and send that information to a computer for interpretation. The touch screens contain no electronics — indeed, no computer parts at all — so they can be easily moved and reconfigured.

A variation on that concept has been deployed by a wine store in Germany, says IBM researcher Claudio Pinhanez. The merchant used to have a system in which customers could use a kiosk to get information about the wines the store stocked, but the inventory was so vast that shoppers often had trouble finding what they wanted and ended up buying low-margin wines from a bin, Pinhanez says. Now, customers can press a "show me" button on the kiosk and the system shines a spotlight on the floor in front of the chosen item.

'FAT FINGERS'

Some researchers say a logical extension of touch technology is technology that recognizes gestures. "Our technology is halfway there," Pinhanez says, "because we recognize the gesture of touching rather than the oc-

Continued on page 38



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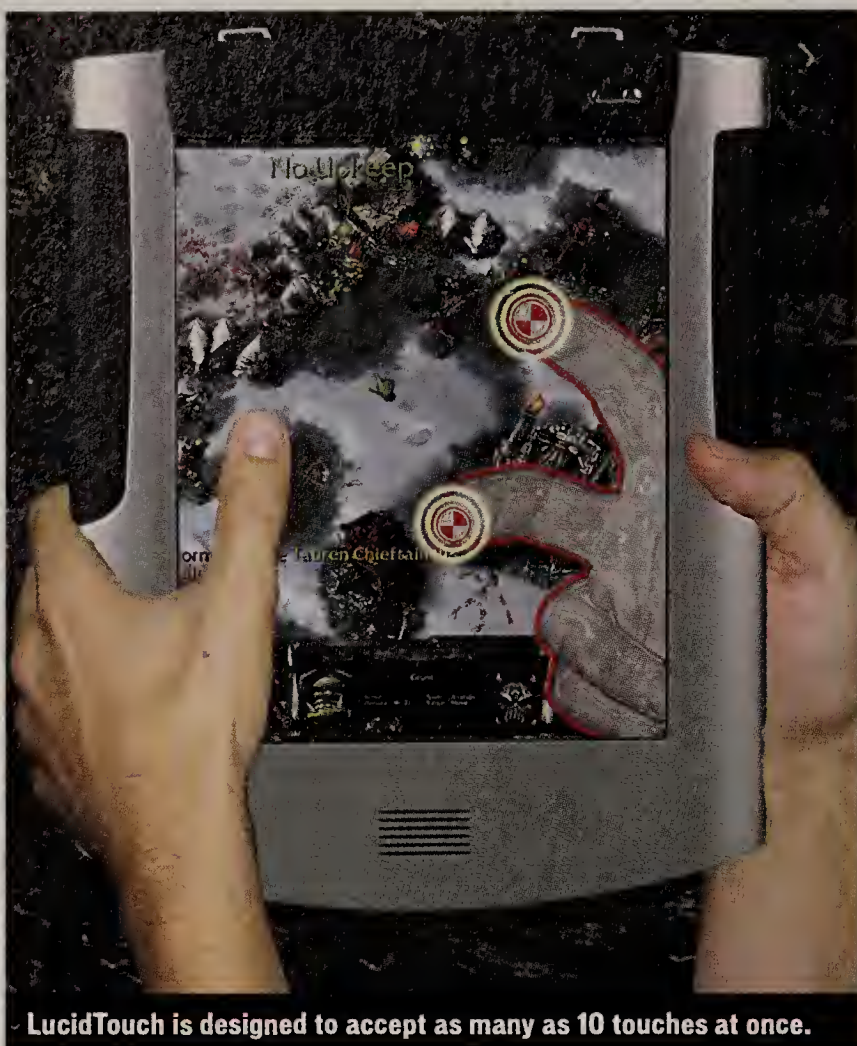


PHOTO COURTESY MICROSOFT CORP.

LucidTouch is designed to accept as many as 10 touches at once.

Continued from page 36
clusion of a particular area. You can go over buttons without triggering them.”

Occlusion can be a problem — a finger or hand can block a user’s view of what he’s doing and lead him to make mistakes — and it’s being attacked in some novel ways. Microsoft Corp. and Mitsubishi Electric Research Laboratories (MERL) collaborated on development of a research prototype called LucidTouch, a two-sided, “pseudo-translucent” mobile device that allows users to issue commands with their fingers on either the front or the back of the device. From the front, the user can see an image of his fingers behind the things to be touched. (The image is what makes this *pseudo-translucent*.) It can accept touches from as many as 10 fingers at once.

“The problem we are addressing is what some people have called the ‘fat

finger’ problem,” says Patrick Baudisch of Microsoft Research. LucidTouch is particularly useful in two situations, he says: when multitouch interaction is desired and when a touch screen is very small. He declined to say when or if LucidTouch might become a commercial product.

Asked whether LucidTouch will one day support gesture recognition, Baudisch says the Microsoft prototypes can already recognize finger motions and understand the meaning of different numbers and positions of fingers. For example, the motion of one finger might be seen as equivalent to a mouse movement and two as a scroll command.

Touch technology is an idea whose time has come, says Baudisch. The rise of mobile devices has been a big catalyst, he says, noting that it’s especially important to use touch interfaces now that devices are getting

smaller and screens are getting so big that they cover the entire device, leaving no room for buttons.

BIG DEVELOPMENTS

But not all the advances in touch technology are going into tiny mobile screens. Microsoft’s Surface systems use two-way touch screens 30 inches across, big enough for several people to sit around and use at once.

Cameras embedded inside Surface sense user input in the form of touch and gestures and capture the information needed to identify objects laid on it. This information is shipped to a garden-variety Windows Vista PC for processing, and the results are returned to Surface by a Digital Light Processing projector. It is a vision-based system, not capacitive or resistive like many touch devices.

Microsoft is working with several commercial partners, including Starwood Hotels & Resorts Worldwide Inc., to introduce Surface, which is due to ship in the spring. The company will initially position the system as an option for leisure, entertainment and retail applications, says Mark Bolger, director of marketing for Microsoft Surface. For example, he says, a hotel guest could use a “virtual concierge” to manipulate maps, photos, restaurant menus and theater information.

Whether Surface is a true multiuser system is a matter of some disagreement. Adam Bogue, a vice president of business development at MERL in Cambridge, Mass., says his lab’s DiamondTouch Table is the only truly multiuser touch device, because it is the only one that can identify different users who are touching it simultaneously.

“Our whole approach has been to support small group collaboration,” he says.

With DiamondTouch, the user literally becomes part of the system. Antennas embedded under the surface transmit small radio frequency signals to the fingertips of users. “When you touch the table, you are capacitively coupling yourself to the signals, completing a circuit through you and into your chair. Each chair is wired into a separate receiver channel,” Bogue explains.

MERL made its first DiamondTouch in 2001 and has since sold more than 100 of the devices to university labs and a few companies looking to incorporate them into their own systems. MERL is now working on applications, and it sells a kit of software and hardware that companies can use to develop their own. (At the end of January, Mitsubishi spun off its DiamondTouch business as an independent company called Circle Twelve Inc.)

Pradeep Khosla, a professor of electrical and computer engineering and robotics at Carnegie Mellon University in Pittsburgh, says touch technology will proliferate and evolve. “When we talk face to face, I make eye gestures, face gestures, hand gestures, and somehow you interpret them all to understand what I am saying. I think that’s where we are headed,” he says.

Microsoft researcher Bill Buxton also anticipates a fusion of different interaction technologies. “There’s been this notion that less is more — you try to get less and less stuff to reduce complexity,” he says. “But there’s this other view that more is actually less — more of the *right* stuff in the *right* place, and complexity disappears.” ■

Trouble Ticket

ISSUE: A project goes from idea to rollout with no security input.

ACTION PLAN: Put the brakes on, even if it means calling in the CIO.

Never Too Soon To Think Security

Every initiative should have a **security review early on.** Waiting can **cost money** and **cause delays.**

“**E**ARLY AND often” is my mantra when it comes to considering the security aspects of any new initiative. More often than not, security is an afterthought, and that can cause delays and add costs. It’s far better if I’m aware of each initiative as planning starts, so I can intervene early enough to head off any security issues.

I’ve been trying to build security checkpoints into our project life-cycle management program. But to date, I’ve only been able to get my name added to the list of managers who need to sign off on what our project management office (PMO) calls the Operational Readiness Review document.

The ORR is released just prior to deployment, and that’s often too late. I need a chance to ensure that security is baked into a project during its early stages, since many of the security problems I’m likely to discover could require a redesign of the application.

It should be clear to everyone involved that

any delay in the project’s go-live date is likely to have a negative effect on the business. But I can’t tell you how many projects have come across my desk for an ORR sign-off with gaping security holes and unanswered questions.

Here’s a recent example: A couple of weeks ago, I got my first heads up about a new application that had already been deployed. I had been traveling when the project was initiated and couldn’t attend any project meetings.

The application, ironically, had been implemented by the PMO to track projects and resources. We previously had been using a Microsoft SharePoint site and spreadsheets for that.

Many of the security pitfalls were so obvious that I spotted them in just three or four minutes, even before I could do a

■ **Many security pitfalls were so obvious that I spotted them in just three or four minutes.**

vulnerability assessment or an in-depth architecture review. First, all users share the same password. Second, users can modify one another’s data. Third, there is no ability to audit or log any activity. And finally, the application is hosted externally and available to the world without encryption.

A LOT OF HOLES

When I approached the project manager for this initiative, he assured me that no critical data was stored in the application. But I had to scratch my head on this one. Of all the departments, I would expect the PMO to be the least likely to disregard the risk of not including security in the project life cycle.

I went down a list of items that typically accompany IT infrastructure projects: network architecture diagrams, critical design reviews, data flows, a product-selection matrix, ROI calculations. Wouldn’t some of those be considered sensitive? No answer.

I then brought up the risks of letting users share passwords and manipulate

one another’s data. Finally, I reminded the manager that this application could be accessed from anywhere in the world. And since there was no integration with our Active Directory environment, ex-employees would have access to it.

As you can imagine, when it came time for me to sign off on the ORR, I had no option but to refuse. Normally, that would halt an initiative in its tracks. But this application had already been launched, and project managers had been told to start using it.

There was nothing I could do on my own; I had to bring the matter to the CIO’s attention. I am responsible for all security-related incidents at my company. If a disgruntled employee were to start deleting or corrupting PMO data, it would be me — not the project manager — who would be sitting in front of the CIO.

I prepared a list of the risks I had uncovered and passed it on to the CIO. As I had hoped, he felt he couldn’t sign off on a project with such unacceptable risks. The remediation work has begun. ■ *This week’s journal is written by a real security manager, “Mathias Thurman,” whose name and employer have been disguised for obvious reasons. Contact him at mathias_thurman@yahoo.com.*

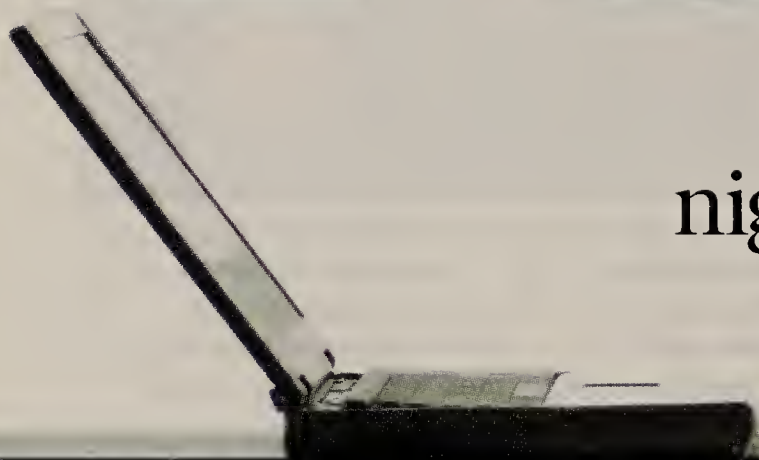
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10 THINGS WE HATE ABOUT LAPTOPS

Users' favorite tool is IT's support nightmare. **By Valerie Rice**



GETTY IMAGES

AT BURLINGTON Northern Santa Fe Railway Co., one laptop was frozen solid (a liquid crystal display is a liquid, after all), another was recovered from the bottom of a creek bed, and another was sliced in half by a train.

At Atlas Air Inc., tech support once took a call from a road warrior who was driving, computing and talking on the phone at the same time. The call ended with a loud crash.

And an outraged laptop user at Applied Materials Inc. added up the time required each year to log into and unlock his laptop, multiplied it by 2,000 laptop users and declared, "Your 'need for protection' is costing the company

more than \$26 million a year. Can't we just turn it off and save the company money?"

Damaged. Lost. Stolen. Too big; too small. Insecure and unreliable. And just plain annoying. Although many users can't imagine working without them, IT professionals say laptops are nothing short of a support nightmare.

Some cope by outsourcing support altogether, others by rigidly adhering to standards and trying not to take personally the hate mail they receive from disgruntled users.

Here, in no particular order, are the top 10 things IT professionals say they hate about laptops.

1 Battery life - what life? Even though battery life in newer models can now top four hours, it's not nearly enough for mobile users and the IT

pros who provide service for them. "I love my laptop — couldn't live without it — but I really hate it, too," says Dr. Joshua Lee, medical director of information services at the University of California, San Diego, Medical Center in La Jolla. "Battery, battery, battery. It is such a pain."

Lee, who is both a practicing physician and an IT director, oversees a team of 50-plus laptop-carrying doctors who sometimes are forced to stop treating a patient and go search for an AC adapter cord so they can continue making notes in a patient's record.

2 Laptops get banged up and broken. "A lot of these laptops are assembled in China, and let's face it, they are flimsy," says Long Le, IT director at Atlas Air, an international air freight company in Purchase, N.Y.

Le oversees 300 laptops that travel to far-flung locales like Asia, South America and Europe. And not all of those laptops travel business class, so he sees a lot of broken hinges and cracked screens and cases — not to mention parts that just fall off.

3 They're tough to fix, and they die young. On average, laptops last three to four years, compared with four to five years for desktops, according to research firm IDC. Matthew Archibald, senior director of global information security and risk management at Applied Materials in Santa Clara, Calif., has noticed a built-in obsolescence in laptops. "The parts last a certain length of time and that's it," he says. "They're tougher to work on, take more expertise and create potentially a lot longer downtime to fix if they have to be shipped to a service center. They're very frustrating."

4 They get lost. At Burlington Northern, consulting systems engineer Brad Hanson says it can be tough to find the company's laptops when they need be to upgraded. That's because tens of thousands of users are constantly moving around BNSF's 32,000 miles of railroad routes, which pass through 28 U.S. states and two Canadian provinces.

5 They're difficult to secure, digitally and physically. Whether they're hacked while logged onto an unsecure public Wi-Fi connection or stolen from an airport restroom, laptops are vulnerable in ways their deskbound cousins never are. Anyone can look over the shoulder of a laptop user at a coffee shop or on an airplane and spy a spreadsheet with next year's corporate financials neatly displayed. And public Wi-Fi networks can be compromised in numerous ways.

6 Security precautions drive users crazy. Users complain that there are too many roadblocks to working online: passwords, screen locks and complex procedures for logging onto VPNs, plus the risk of getting booted off unsecure Wi-Fi connections. They're often in denial about the need for security, says Archibald,

THE Outsourcing Option

I N-HOUSE SUPPORT of laptops is liable to cost a company more money by far than support of servers, says Ron Silliman, an analyst at Gartner Inc. His view: The most cost-effective way to support laptops is to contract with third parties offering on-site support.

But many IT folks are unwilling to take that advice. Stephen Laster, CIO at Harvard Business School, says his group has to support the campus; otherwise it risks becoming too distant from what's really going on. "The interchange between us and our users is important, and it defines our culture," he says.

Silliman agrees that universities are one place where on-site support can be cost-effective, mostly because of the

almost free labor provided by the many work-study college students.

But Burlington Northern Santa Fe Railway decided several years ago to outsource all of its IT support, not just the laptop portion, to IBM Global Services. "With [close to 40,000] users and such a far-flung area to cover, it was mainly a financial decision to outsource all of our computing infrastructure," says Brad Hanson, consulting systems engineer.

The same is true at Applied Materials, which outsources support for nearly 12,000 users through "badged" third-party employees who work in the company's various locations, says Matthew Archibald, senior director of global information security and risk management. "It's just so much more cost-effective with this many machines," he says.

— VALERIE RICE

who says he recently received an e-mail from a user asking, "We're not building nuclear bombs here, why do I have to type in so many passwords?"

7 Wi-Fi is still the Wild, Wild West. Configuring laptops for wireless connectivity and keeping those configurations up to date are among the biggest nightmares IT professionals face on a daily basis. IT must decide which air cards to use, whether to employ encryption or set up a VPN, and for which employees and under what circumstances. Should the company support mom-and-pop providers for its users on the road, or only big, trusted carriers? What about employees with their own home office routers and networks? The support issues are never-ending, IT managers say.

And clueless users make everything worse, says Vince Kellen, vice president of information services at DePaul University in Chicago. "Wireless overwhelms nontechnical people," he says flatly. "Users just can't grasp the complexity."

8 Laptops spawn uber-entitled users. The nature of mobile computing has given users the

expectation that they ought to be able to work when and where they want to, regardless of what it takes to support them. "They can't get online at a friend's house, so they can't pick their football draft in their football pool, so I need to fix this situation immediately," Archibald says. "I get beat up by users every single day who want to be able to do whatever they want and have us support it."

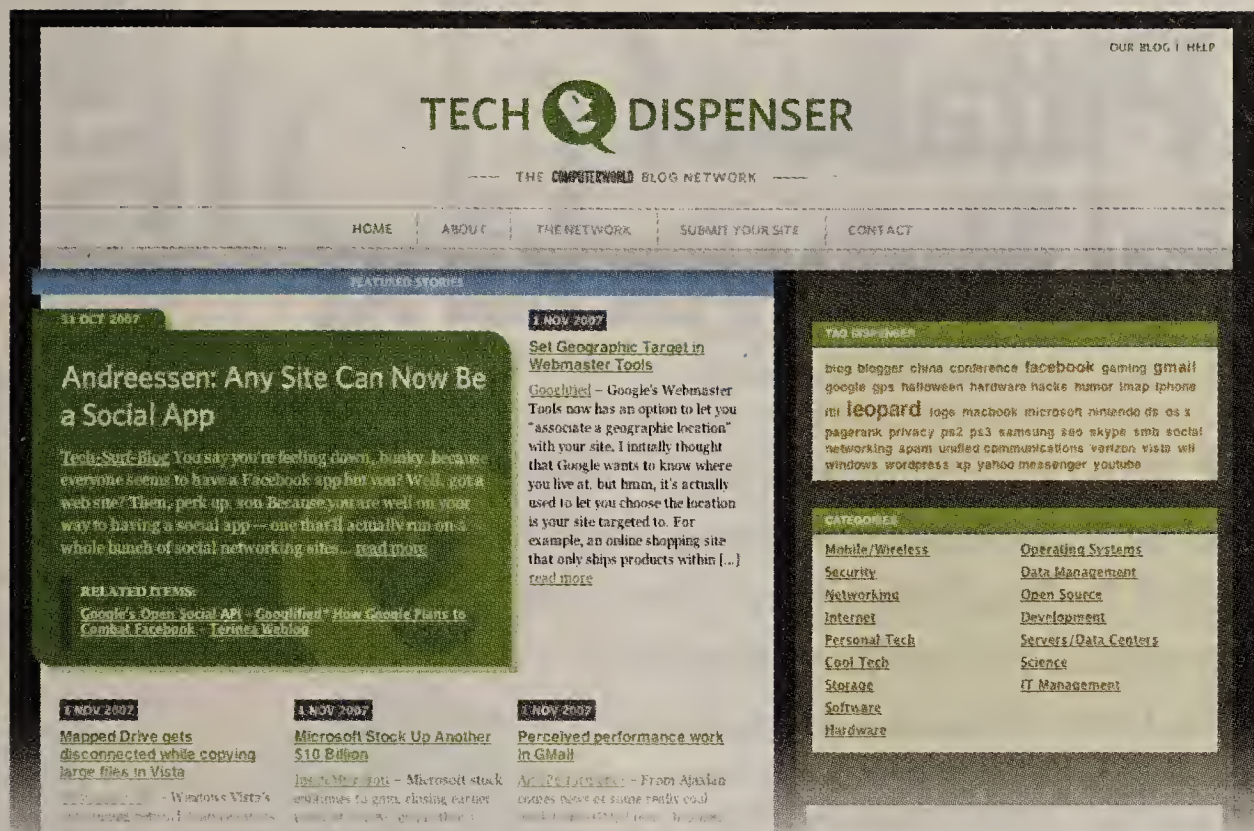
9 They're too big or too small. Laptops are either too large — leading users to complain about lugging all that weight around — or they're too small, leaving users who have fat fingers feeling persecuted.

10 Software performance just ain't the same. Users want the power, speed, connectivity and full-bodied applications of a desktop PC packed into a unit that's effortlessly portable with long battery life. But in reality, big applications just don't work as well on a laptop. When users want to multitask with complex applications, even the fastest notebook processor can bog down. ■

Rice is a freelance writer in West Newbury, Mass.



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Bart Perkins



Risk of leaking corporate secrets. Companies often sanction social networking for the purpose of exchanging professional information. But take great care to protect corporate secrets. Definitions of *secret* may vary or be misunderstood, and critical information may inadvertently be revealed. Provide clear guidelines across the company, as well as to your suppliers and outsourcers.

Limited executive use.

Many articles on social networking claim that it will facilitate sales. Executive use of social networking is not widespread, however. Many executives already have substantial personal networks and rely less on new technological platforms for interaction. (This will undoubtedly change in the future, but networks have limited selling power today.)

While social networking does offer many benefits, there are corporate costs and pitfalls to be considered. Organizations need to establish policies to address issues such as personal usage, business relevance, site restrictions and information confidentiality. Take time to thoroughly investigate and address these issues to maximize the effectiveness of social networking. ■

Bart Perkins is managing partner at Louisville, Ky.-based Leverage Partners Inc., which helps organizations invest well in IT. Contact him at BartPerkins@LeveragePartners.com.

The Pitfalls of Social Networking

THE USE of social networking is rising dramatically, and its scope has expanded far beyond the personal realm. Politically oriented videos and blogs are being posted to YouTube in an effort to influence primary elections. Even Britain's Queen Elizabeth posted her

2007 Christmas message on YouTube (www.youtube.com/theroyalchannel).

Corporate and government entities are increasingly using social networking to facilitate communication and collaboration among individuals and groups, both internally and externally. While there are clear benefits to increasing communication, social networks also present a number of challenges, including the following:

Bandwidth and storage consumption. Many social network members post pictures, music, videos, high-definition movies and other large files. Downloading and storing these files can cripple your infrastructure and make capacity planning virtually impossible.

Potential legal liability. Students at Canterbury's University of Kent created a Facebook group named "For Those Who Hate the Little Fat Library Man," to harass a librarian they disliked. In the U.S., if em-

ployees were to use corporate IT resources for similar purposes, the company could be held responsible in any ensuing litigation.

Exposure to malware.

Social networks are designed to be open, with few restrictions on content or links. In most cases, security was not a primary design criterion. Thus, these networks are potential vehicles for introducing viruses, worms and spyware.

Decreased employee productivity. Social networking for personal purposes can affect corporate productivity. A Goldman Sachs trader in the U.K. was spending four work hours a day on Facebook. When he was told to stop,

■ **Downloading and storing large files can cripple a company's infrastructure and make capacity planning virtually impossible.**

he posted the warning e-mail and wrote, "It's a measure of how warped I've become that, not only am I surprisingly proud of this, but losing my job worries me far less than losing Facebook."

Even when networking is used for business purposes, corporations may want to limit the number of networks employees use. Monitoring many networks can become incredibly time-consuming. Moreover, interfaces among current networks don't support robust information-sharing. Unfortunately, unless all interested parties use the same network, many benefits are lost. Consider designating specific networks for company-wide communications.

Disclosure of personal information. Companies regularly search MySpace, Classmates.com, LinkedIn and other social networking sites to glean information about potential hires and competitors, but postings should always be taken with a grain of salt.

Career Watch

■ Q&A

Elizabeth Holloran

The product marketing manager at training firm **SkillSoft Public Ltd.** talks about balancing hard and soft skills.

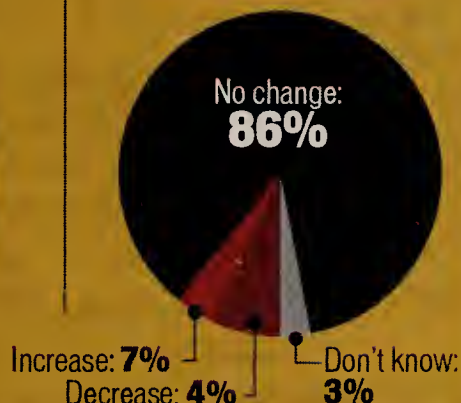
NO BIG RUSH TO OFFSHORE

Offshore outsourcing may not be the great hollower of IT departments that it has been portrayed to be. A survey conducted last month found that even companies with 1,000 or more employees aren't likely to be offshoring; only 11% of those respondents said that they are.

DOES YOUR COMPANY CURRENTLY ENGAGE IN OFFSHORE OUTSOURCING OF IT?



IN THE NEXT TWO YEARS, HOW WILL YOUR COMPANY'S LEVEL OF OFFSHORE OUTSOURCING CHANGE?



CIOS AT COMPANIES THAT HAVE ENGAGED IN OFFSHORE OUTSOURCING IN THE PAST WERE ASKED WHY THEY STOPPED.

Required too much oversight/management	59%
Cost savings not realized	30%
Quality of work not good enough	23%
Lowered morale of U.S.-based workers	11%
Security concerns	6%
Other	14%
Don't know	5%

NOTE: MULTIPLE RESPONSES ALLOWED (THIS APPLIES TO BAR CHART ONLY).
SOURCE: ROBERT HALF TECHNOLOGY SURVEY OF MORE THAN 1,400 CIOS,
FROM A RANDOM SAMPLE OF U.S. COMPANIES WITH 100 OR MORE EMPLOYEES

Which certifications are most likely to help IT professionals stay employed?

The kinds of certifications that assist an IT professional in getting ahead or getting noticed are those that provide additional knowledge about a particular technology or area. What will assist an IT professional in staying employed is a technical certification combined with soft skills. We are seeing IT professionals combining business-type certifications and soft skills with IT certifications. Soft skills like communication, leadership, interpersonal skills, negotiation and customer service are gaining popularity among many IT certification holders. These soft skills and certifications are being sought for all of the same reasons IT certifications are popular — career advancement, increased competitive advantage, improved processes, enhanced bottom line.

Why are soft skills becoming more important?

Technical certifications demonstrate that the individual has the knowledge necessary to perform at a certain level and is technically savvy, but today companies are looking for IT professionals that have a combination of technical acumen and business acumen. Soft skills bring added value. An IT professional who produces excellent work *and* can speak to customers *and* can manage projects is a much stronger candidate than one who only has technical expertise. In today's work environment, companies are looking for IT professionals that are technically savvy and can communicate, manage and work well interpersonally with internal people and outside customers.

Are employers really noticing those things on résumés?

For all of the reasons stated above, we believe employers are noticing certifications and taking them into account as a positive attribute when hiring. Also, our customers continue to look to us for support on certifications that span IT *and* business areas. As such, we feel this is a good indicator of continued importance and interest from both the individual and hiring companies.

— Jamie Eckle

Web Manager 2.0

A **NEW BREED** of Web manager is emerging to replace the traditional webmaster, says Tony Byrne, founder of CMS Watch, an analyst firm in Olney, Md., that evaluates Web content management systems. The title of webmaster — which implies lots of HTML coding and page layout — is "probably on its way out," Byrne says.

While centralized layout templates and HTML conversion tools have automated some of the traditional work, Byrne says the new "Web manager 2.0" needs

a higher order of skills in areas such as these:

- Managing, analyzing and testing user experiences.
- Understanding information architecture, organization and search engines.
- Assessing the consumer value, or return on investment, of the Web site.
- Lobbying to make sure the Web site is customer-driven.

Plus, many Web sites and intranets have become bloated with too many pages, Byrne says, so today's Web managers are looking to get rid of the clutter.

— MITCH BETTS

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TRUE TALES OF IT LIFE AS TOLD TO SHARKY

Good News

This organization is six months into a multisite, big-ticket ERP project staffed by consultants and employees at each site. "The small tech team at one site requested a walk-through of the 700-task project plan, to get a better understanding and a chance to prepare for the tasks ahead," says an IT pilot fish there. Impossible, say project leaders. Why not? "The tasks are somewhat undefined and will not be fully understood until undertaken," quotes fish. "The good news is, we're slightly ahead of schedule."

Mail Call

Construction company user complains to pilot fish about

intermittent problems retrieving e-mail on his Treo. "Lately, every time I go to my job site, I never receive my e-mail. As soon as I return to the office, e-mail is working again." Do you have cell phone service out at the job site? fish asks. "No," says user. "But what does that have to do with e-mail?"

Not Superstitious, Just Careful

When it's upgrade time for this organization's security software, pilot fish downloads the latest version – and begins to get just a little nervous. "Following our naming convention, I used the product initials and the version number: SEP 11," says fish. "Next,

I watched a short training session on the vendor's Web site. The training slide started out with a picture of skyscrapers. This was starting to get scary. Then we installed the software on a test server, pushed the client out to a test PC, and tried accessing a popular business intelligence program and accessing some Excel files. The Excel files disappeared. Needless to say, we decided to skip this version of the security software."

How to Tell a . . .

Pilot fish is buttonholed at a party by an acquaintance who has just launched his own IT consulting company. "He was sure that if we stood side by side for a job, he would win hands down," fish says. "My almost 30 years in IT without finishing my B.S. would be no match for his brand-new B.S. in business communications, and MCSE and A+ certifications. He handed me a card proclaiming his newly formed

company specializing in telephony and networking for home and small-to-midsize businesses. He was boasting about being the best telephony guy in the area and saying that everyone should take a card and keep him in mind rather than calling those geeks from the big stores. I didn't want to correct him in front of everyone, but he kept pronouncing it te-le-phony instead of te-leph-o-ny. I guess I should be glad I didn't waste my time and money going to his skool. . . ."

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Frank Hayes

Gone Wrong



THE MESS at Société Générale is still unraveling. The big French bank took a \$7 billion loss last month because of a rogue trader, and government investigators are continuing to spot new problems in the bank's story that it was all the fault of one greedy computer-genius financial trader gone wrong.

Think this has nothing to do with corporate IT? Think again.

Sure, there's an obvious IT security angle, at least according to the bank's version. Trader Jerome Kerviel "misappropriated the IT access codes belonging to operators in order to cancel certain operations," says the bank's official explanation of what happened. That means Kerviel stole some passwords.

But dig deeper, and you'll find something more disturbing. Kerviel started at Société Générale in 2000 and then spent five years doing back-office work. So he knew the bank's procedures and controls for traders inside and out — including everything about the daily trading reports that had to be reconciled.

In 2005, Kerviel became an arbitrage trader himself. His job was to buy a portfolio of futures options and at the same time sell a similar portfolio worth a little

more. With a small profit on every trade, the job involved making a huge number of trades.

Kerviel really did make the buys. But he faked some of the sales — to the tune of \$73 billion, which is more than the bank was worth. Kerviel was betting he'd get a higher price later. He was wrong. He was caught just as the market started to fall. Selling those futures at a loss is what cost Société Générale \$7 billion.

How did Kerviel get \$73 billion in the hole? He's no computer genius. But he knew how the controls worked. And he knew they were designed to prevent traders from stealing from the bank,

■ **We take this seriously. We take it personally. And the people we work for? Some of them don't.**

not to stop cheating that might score bigger profits.

So he knew which transactions would be checked closely, and how they'd be checked. He knew how to fake transactions and how to make those transactions look innocuous.

And, Kerviel told government investigators, he knew that other traders were routinely cheating in similar ways and that management ignored it as long as the results were profitable in the end.

No such cheating by other Société Générale traders has been reported. But it turns out that Kerviel had been red-flagged for suspicious trading before. He talked his way out of trouble, convincing managers that there was nothing wrong.

Disturbed yet? You should be.

In IT, we think of implementing controls as our job, whether they're for financial traders

or Sarbanes-Oxley or HIPAA or anything else. We spec out the software, we secure the systems, we manage the operations. And we tear our hair out when someone steals a password or exploits a security hole. We take it seriously. We take it personally.

And the people we're working for? They don't. At least, some of them don't.

We don't make the financial and Sarb-Ox and HIPAA rules. They've been handed to us to implement. We've done that. And the same management that dictated the what and how of those controls is, in too many organizations, fully prepared to sabotage them.

Systems are composed of technology and users. We've always assumed that if management told us to build a system, we'd manage the technology and they'd manage the users.

What should IT people do when "management support" for a project means a budget plus a desire for the project not to work as intended? I don't have an answer for that.

But thanks to Société Générale, we know what the results will be. ■

Frank Hayes is Computerworld's senior news columnist. Contact him at frank_hayes@computerworld.com.



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